

300 E. Mineral Ave., Suite 10 Littleton, CO 80122-2631 303/781-8211 303/781-1167 Fax

July 18, 2006

Mrs. Diana Whitney
State of Utah
Division of Oil Gas and Mining
P.O. Box 145801
Salt Lake City, Utah 84114-5801

RE: Application for Permit to Drill - Petro-Hunt, L.L.C.

Lamb Trust 31B-1-1 – 178' FNL & 2,590' FWL, NE/4 NW/4

Section 31, T15S, R3E, SLB&M, Sanpete County, Utah

Dear Mrs. Whitney:

On behalf of Petro-Hunt, L.L.C.. (Petro-Hunt), Buys & Associates, Inc. respectfully submits the enclosed original and one copy of the Application for Permit to Drill (APD) for the above referenced fee surface and mineral vertical well. A request for exception to spacing (R649-3-2) is hereby requested based on topography since the well is located less than 460' of the drilling unit boundary. Petro-Hunt is <u>not</u> the only owner and operator within 460' of the proposed well. Approval of the exception location is pending at this time from Petro-Hunt. Included with the APD is the following supplemental information:

Exhibit "A" - Survey plats, layouts and cut and fill drawing of the proposed well site;

Exhibit "B" - Proposed location maps with access corridor:

Exhibit "C" - Lamb Trust Surface Use Agreement (pending);

Exhibit "D" - Drilling Plan and Drilling Procedure;

Exhibit "E" - Surface Use Plan;

Exhibit "F" - Typical BOP and Choke Manifold diagram.

Please accept this letter as Petro-Hunt's, written request for confidential treatment of all information contained in and pertaining to this application.

Thank you very much for your timely consideration of this application. Please feel free to contact myself or Mick Homiston of Petro-Hunt at 701-863-6622 if you have any questions or need additional information.

Sincerely,

Den Hamilton

Agent for Petro-Hunt

cc: Mick Homiston, Petro-Hunt Cary Vice, Petro-Hunt Lee Holmstead, Sanpete County RECEIVED

JUL 2 0 2006

DIV. OF OIL, GAS & MINING

ORIGINAL

CONFIDENTIAL

#### STATE OF UTAH

			Di	VISION OF OIL	, GAS AND MINING		AMENDED (highlight	REPORT Changes)
		APPLICAT	ION FOR	PERMIT TO	DRILL	5. MINERAL Patente		6. SURFACE: Fee
1A. TYPE OF WO	DRK: [	RILL 🔽 I	REENTER [	DEEPEN		7. IF INDIA	ALLOTTEE OR TR	BE NAME:
B. TYPE OF WE	LL: OIL 🗹	GAS 🗌 (	OTHER	SING	GLE ZONE MULTIPLE ZO	0.11111	CA AGREEMENT NA	ME:
2. NAME OF OPE						Λ	AME and NUMBER: TRUST 31B	-1-1
3. ADDRESS OF 258 - 119th	OPERATOR:	CITY Killdee	7 <b>.</b>	TATE ND ZIP 586	PHONE NUMBER: (701) 863-662	10. FIELD	AND POOL, OR WILE	
4. LOCATION OF				7X ZIP	39.474751 <b>/</b>		TR, SECTION, TOWN	ISHIP, RANGE,
AT SURFACE:	178' FNL PRODUCING 20	& 2,590' FWL DNE: \178' FNL	-, '4369 - <b>&amp; 2,590' F</b>	4424 - WL,	111.628658 6 60	NENW		3E S
14. DISTANCE IN	MILES AND DIR	ECTION PROM NEAR	REST TOWN OR P	POST OFFICE:		12. COUNT	Y:	13. STATE: UTAH
		Wales, Utah			roul	Sanpe	L	
15. DISTANCE TO	ONEAREST PRO	PERTY OR LEASE L	INE (FEET)	16. NUMBER OF	ACRES IN LEASE: )	1	ACRES ASSIGNED T	O THIS WELL:
	O NEAREST WEL R) ON THIS LEAS	L (DRILLING, COMP E (FEET)	LETED, OR	19. PROPOSED	<b>7</b> / N	20. BOND DESCR	IPTION: Surety RLB0	
		ER DF, RT, GR, ETC	·):		TE DATE WORK WILL START:	23. ESTIMATED D	URATION:	
5,583' GF	₹			9/6/2006		90 days	<del></del>	
24.			PROPO	SED CASING A	ND CEMENTING PROGRA	M		
SIZE OF HOLE	CASING SIZE	, GRADE, AND WEIG	HT PER FOOT	SETT G DEPTH	CEMENT TYPE,	QUANTITY, YIELD, AND	SLURRY WEIGHT	
<del></del>								
26"	20"	.25" w.t.		80	Ready mix to surface			
17-1/2"	13-3/8"	J55	54.5#	2,300	50/50 Poz & Premium	950/485 sx	1.98/1.16	12.5/15.8
12-1/4"	9-5/8"	P110	53.5#	· · · · · · · · · · · · · · · · · · ·	50/50 Poz	1555 sx	1.71	13.0
8-1/2"	7-5/8"	Q125	39.0#	11,200	50/50 Pox	480 sx	1.24	14.35
6-1/2"	5-1/2"	L80	20.0#	14,700	50/50 Poz	300 sx	1.43	14.3
		<del>/</del>	***************************************					
25.				ATTA	CHMENTS			
VERIFY THE FO	LLOWING ARE A	ITACHED IN ACCOR	DANCE WITH THE	E UTAH OIL AND GAS C	ONSERVATION GENERAL RULES:			
<b>☑</b> WELL PI	AT OR MAP PRE	PARED BY LICENSE	D SURVEYOR OR	RENGINEER	COMPLETE DRILLING PLA	w C	ONFIDE	NTIAL
EVIDEN	CE OF DIVISION	OF WATER RIGHTS	APPROVAL FOR (	JSE OF WATER	FORM 5, IF OPERATOR IS	PERSON OR COMPAN	Y OTHER THAN THE	LEASE OWNER
NAME (PLEASE PRINT) Don Hamilton					TITLE Agent for Pe	etro-Hunt, L.L.C	,	
SIGNATURE	Don	Hami	lton		DATE 7/18/2006			

(This space for State use only)

43-039 30034

APPROVAL:

JUL 2 0 2006

#### Section 31, T.15 S., R.3 E., S.L.B. & M. 2590' FWL N89'06'37"E N89'06'37"E 2653.23 2653.23 NOT FOUND NOT FOUND REESTABLISHED REESTABLISHED FROM PREVIOUS SURVEY FROM PREVIOUS SURVEY NOT FOUND 178 REESTABLISHED / FROM PREVIOUS SURVEY PETRO-HUNT, L.L.C. LAMB TRUST #31B-1-1 UNGRADED GROUND = 5583.22 589"13'21"W S8973 S8913'21"W 2666.55 1333.27 NOT FOUND REESTABLISHED: FOUND 2 - 2003 SANPETE COUNTY ALUM. CAP REF. MKR. FROM PREVIOUS SURVEY 3 % FOUND 2000 SANPETE BASIS OF BEARING COUNTY ALUM, CAP T.15S. N89\*20'01"E T.15S. N89'20'01"E N89'20'01"E 2679.87 T.16S 1339.94 T.16S. 1339.94 NOT FOUND FOUND 2000 SANPETE REESTABLISHED COUNTY ALUM, CAP FROM PREVIOUS SURVEY BASIS OF BEARINGS BASIS OF BEARING USED WAS N89°20'01"E BETWEEN THE SOUTHWEST CORNER AND THE SOUTHEAST CORNER OF SECTION 31, T.15 S., R.3 E., S.L.B. & M. LATITUDE = 39°28'28.94106" (38.474705850) NAD 83 LONGITUDE = -111'37'45.27788" (-111.629243856) NAD 83

#### **PROJECT**

#### Petro-Hunt, L.L.C.

WELL LOCATION, LOCATED AS SHOWN IN THE N.E. 1/4 OF THE N.W. 1/4 OF SECTION 31, T.15 S., R.3 E., S.L.B. & M. SANPETE COUNTY, UTAH

#### LEGEND

= SECTION CORNERS (LOCATED)

→ = QUARTER SECTION CORNERS (LOCATED)

⇒ SECTION CORNERS (NOT LOCATED)

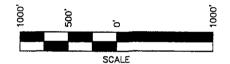
→ = QUARTER SECTION CORNERS (NOT LOCATED)

PROPOSED WELL HEAD

NOTE: THE PURPOSE OF THIS SURVEY WAS TO PLAT THE PETRO-HUNT, L.L.C. LAMB TRUST #31B-1-1 LOCATION. LOCATED IN THE N.E. 1/4 OF THE N.W. 1/4 OF SECTION 31, T.15 S., R.3 E., S.L.B. & M., SANPETE COUNTY, UTAH.

#### BASIS OF ELEVATION

ELEVATION BASED ON THE SOUTHWEST CORNER OF SECTION 6, T.16 S., R.3 E., S.L.B. & M. WHICH IS A SANPETE COUNTY ALUM CAP WITH AN ELEVATION OF 5559.00'.



#### CERTIFICATE

THIS IS TO CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION, AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MANAGEMENT AND BELIEF.





## Jones & DeMille Engineering

1535 South 100 West — Richfield, Utah 84701 Phone (435) 896-8266 Fax (435) 896-8268 www.jonesanddernille.com

#### Well Location Plat for

Petro-Hunt, L.L.C. Lamb Trust #31B-1-1

- T.W.G. T.R.G. T.R.G.  DATE DWO,NAME SCALE 06/22/06 WELL_LOC 1"=1000"	DESIGNED	SURVEYED	CHECKED	DRAWN	PROJECT NO.	SHEET NO.
	L -	T.W.G.	T.R.G.	T.R.G.		
06/22/06   WELL_LOC  1"=1000"					0606-130	1
	06/22/06		WELL_LOC	1"=1000"		

# STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

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	П		

AMENDED REPORT	
(highlight changes)	

	APPLICATION FOR PERMIT TO DRILL							5. MINERAL LEASE NO: 6. SURFACE: Patented Fee		
1A. TYPE OF WO	rk: D	RILL 🔽	REENTER [	] DEEPEN				7. IF INDIAN, A	ALLOTTEE OR	TRIBE NAME:
B. TYPE OF WEI	LL: OIL 🗹	GAS 🗌	OTHER	SIN	GLE ZONE [	MULTIPLE ZO	NE Z	8. UNIT or CA	AGREEMENT I	JAME:
2. NAME OF OPE	RATOR:								E and NUMBER	2
PETRO-HU	JNT, L.L.C.								RUST 31	
3. ADDRESS OF	OPERATOR:					PHONE NUMBER:			D POOL, OR W	
258 - 119th		<sub>CITY</sub> Killde	er sta	ATE ND ZIP 586	340	(701) 863-6622	2	Wildcat		
4. LOCATION OF WELL (FOOTAGES)  4. LOCATION OF WELL (FOOTAGES)  11. CITE/CITE, SECTION, TOWNSHIP, RANGE,										
AT SURFACE:	178' FNL 8	k 2,590' FW	L, 43691	145	111 1.78	71.E <b>U</b>			31 159	3E S
AT SURFACE: 178' FNL & 2,590' FWL, 4369442 \ -111.628658 NENW 31								01 100	, 3L 3	
14. DISTANCE IN	14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE:									13, STATE:
1.02 mile	s south of V	Vales, Utah	}				Ì	12. COUNTY:		UTAH
15. DISTANCE TO	NEAREST PROF	PERTY OR LEASE	LINE (FEET)	16. NUMBER O	ACRES IN LEA	SE:	17. NU			TO THIS WELL:
64'						21	1			40
	NEAREST WELL		IPLETED, OR	19. PROPOSED	DEPTH:		20. BO	ND DESCRIPT	ION:	
None	R) ON THIS LEASE	(FEET)				14,700	Sta	tewide S	urety RLE	10008181
21. ELEVATIONS	(SHOW WHETHE	R DF, RT, GR, ET	C.):	22. APPROXIMA	TE DATE WOR			TIMATED DUR		70000101
5,583' GR	₹			9/6/2006	6		90	days		
									<del></del>	
24.			PROPOS	SED CASING A	ND CEMEN	TING PROGRAM	A			
SIZE OF HOLE	CASING SIZE,	GRADE, AND WE	IGHT PER FOOT	SETTING DEPTH		CEMENT TYPE, C	QUANTITY, Y	IELD, AND SL	URRY WEIGHT	
26"	20"	.25" w.t.		80	Ready mi	x to surface	· · · · · · · · · · · · · · · · · · ·			
17-1/2"	13-3/8"	J55	54.5#	2,300	50/50 Po	z & Premium	950/48	35 sx	1.98/1.16	12.5/15.8
12-1/4"	9-5/8"	P110	53.5#	7,850	50/50 Poz	7	155	55 sx	1.71	13.0
8-1/2"	7-5/8"	Q125	39.0#	11,200	50/50 Poz	Z	48	30 sx	1.24	14.35
6-1/2"	5-1/2"	L80	20.0#	14,700	50/50 Poz	Z	30	00 sx	1.43	14.3
25.				ATTA	CHMENTS					
VERIFY THE FOL	LOWING ARE AT	TACHED IN ACCO	ORDANCE WITH THE	UTAH OIL AND GAS C	ONSERVATION (	GENERAL RULES:				
( <del>****</del> **					1 1720			co	NFIN	ENTIAL
	AT OR MAIL LIKE	WED BY LICEN	SED SURVEYOR OR	ENGINEEK	✓ ∞	MPLETE DRILLING PLAY	N	CO		
EVIDENC	E OF DIVISION O	F WATER RIGHT:	S APPROVAL FOR U	SE OF WATER	F0	RM 5, IF OPERATOR IS I	PERSON OF	COMPANY C	THER THAN TH	HE LEASE OWNER
								····		
NAME (PLEASE	<sub>PRINT)</sub> Don H	lamilton			TITL	Agent for Pet	tro-Huni	t, L.L.C		
	7	11 .	10	· · · · · · · · · · · · · · · · · · ·				<u> </u>		
SIGNATURE	Uon	Nam	lton		DATE	7/18/2006				
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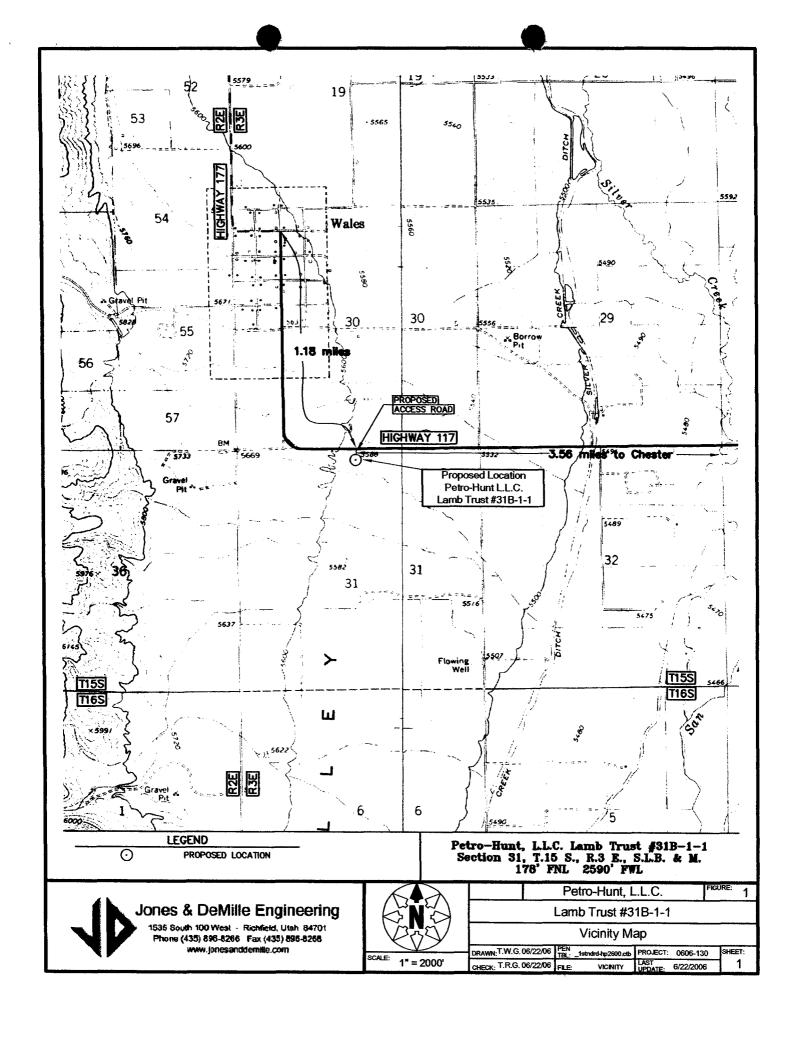
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(See Instructions on Reverse Side)

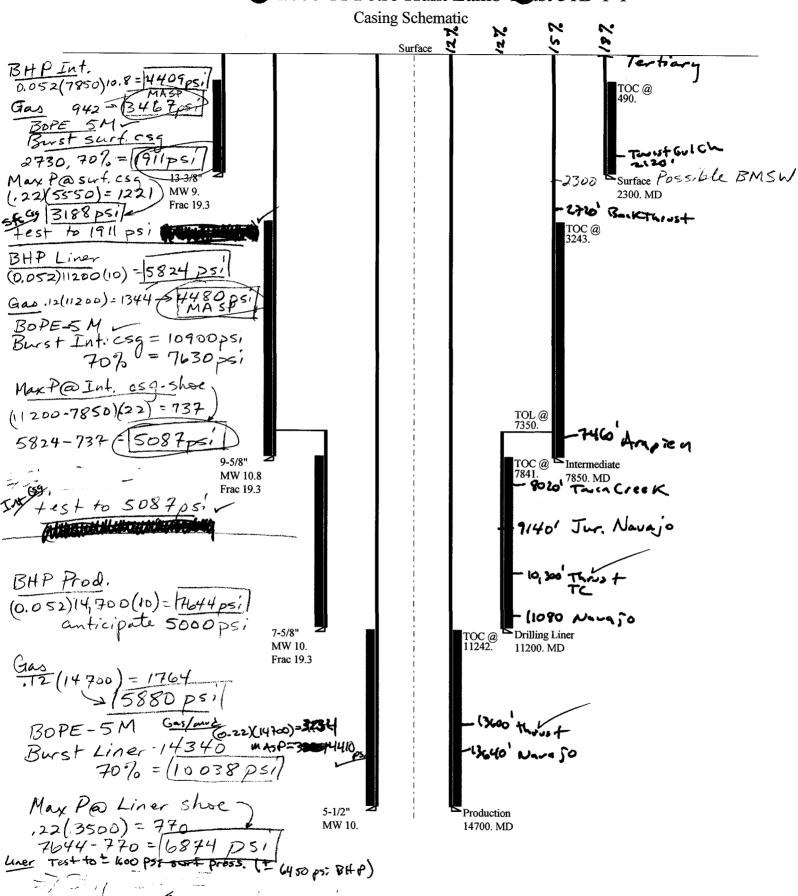
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JUL 2 0 2006

#### Section 31, T.15 S., R.3 E., S.L.B. & M. **PROJECT** Petro-Hunt, L.L.C. WELL LOCATION, LOCATED AS SHOWN IN THE N.E. 1/4 OF THE N.W. 1/4 OF SECTION 31, T.15 S., R.3 E., S.L.B. & M. SANPETE COUNTY, UTAH N89'06'37"E N89'06'37"E 2653,23 2653.23 NOT FOUND NOT FOUND LEGEND REESTABLISHED REESTABLISHED FROM PREVIOUS SURVEY FROM PREVIOUS SURVEY ► = SECTION CORNERS (LOCATED) NOT FOUND ► = QUARTER SECTION CORNERS (LOCATED) REESTABLISHED FROM PREVIOUS SURVEY ⇒ SECTION CORNERS (NOT LOCATED) → = QUARTER SECTION CORNERS (NOT LOCATED) = PROPOSED WELL HEAD PETRO-HUNT, L.L.C. LAMB TRUST #31B-1-1 NOTE: THE PURPOSE OF THIS SURVEY WAS TO PLAT UNGRADED GROUND = 5583.22 THE PETRO-HUNT, L.L.C. LAMB TRUST #31B-1-1 LOCATION. LOCATED IN THE N.E. 1/4 OF THE N.W. 1/4 OF SECTION 31, T.15 S., R.3 E., S.L.B. & M., SANPETE COUNTY, UTAH. BASIS OF ELEVATION ELEVATION BASED ON THE SOUTHWEST CORNER OF SECTION 6, T.16 S., R.3 E., S.L.B. & M. WHICH IS A SANPETE COUNTY ALUM CAP WITH AN ELEVATION OF 5559.00'. 589"13'21"W S89'13'21"W S89"3'21"W õ 2666.55 1333,27 NOT FOUND FOUND 2 - 2003 SANPETE REESTABLISHED. COUNTY ALUM, CAP REF. MKR. FROM PREVIOUS SURVEY SCALE CERTIFICATE THIS IS TO CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION, AND THAT RE TRUE AND CORRECT TO THE BEST FOUND 2000 SANPETE BASIS OF BEARING COUNTY ALUM. CAP T.15S. T.15S N89"20"01"E N89'20'01"E N89'20'01"E T.16S. 2679.87 1339.94 1339.94 Jones & DeMille Engineering T.16S. NOT FOUND FOUND 2000 SANPETE 1535 South 100 West - Richfield, Utah 84701 Phone (435) 896-8268 REESTABLISHED COUNTY ALUM, CAP FROM PREVIOUS SURVEY Fax (435) 896-8268 www.jonesanddemille.com Well Location Plat for BASIS OF BEARINGS Petro-Hunt, L.L.C. Lamb Trust #31B-1-1 BASIS OF BEARING USED WAS N89'20'01"E BETWEEN THE SOUTHWEST CORNER AND THE SOUTHEAST CORNER OF SECTION 31, T.15 S., R.3 E., S.L.B. & M. LATITUDE = 39'28'28.94106" (38.474705850) NAD 83 LONGITUDE = -111'37'45.27788" (-111.629243856) NAD 83 SHEET NO. T.W.G. T.R.G. T.R.G. 0608-130 1 DATE DWG.NAME WELL\_LOC. SCALE 1"=1000" 06/22/06



# 2006-11 Petro Hunt Lamb 1 st 31B-1-1



Adequate DRD 1/17107

Well name:

2006-11 Petro Hunt Lamb Trust 31B-1-1

Operator:

Petro-Hunt L.L.C.

String type:

Surface

Project ID:

Location:

Sanpete County

43-039-30034

**Design parameters:** 

Collapse

Mud weight:

9.000 ppg Design is based on evacuated pipe.

Design factor

Minimum design factors: Collapse:

1.125

**Environment:** H2S considered?

Surface temperature:

75 °F Bottom hole temperature: 107 °F Temperature gradient: Minimum section length:

1.40 °F/100ft 250 ft

No

1.80 (J)

1.80 (J)

1.60 (J)

1.50 (J)

1,994 ft

**Burst:** 

Design factor

1.00

Cement top:

490 ft

**Burst** 

Max anticipated surface

No backup mud specified.

pressure: Internal gradient:

Calculated BHP

2,024 psi 0.120 psi/ft

2,300 psi

Tension:

8 Round STC: 8 Round LTC:

**Buttress:** Premium:

Neutral point:

Body yield: 1.50 (B)

Tension is based on buoyed weight.

Non-directional string.

Re subsequent strings:

Next setting depth: Next mud weight: Next setting BHP:

7.850 ft 10.800 ppg 4,404 psi 19.250 ppg

Fracture mud wt: Fracture depth: Injection pressure:

2,300 ft 2,300 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	2300	13.375	54.50	J-55	ST&C	2300	2300	12.49	1996.3
Run Seq	Collapse Load (psi) 1075	Collapse Strength (psi) 1130	Collapse Design Factor 1.051	Burst Load (psi) 2300	Burst Strength (psi) 2730	Burst Design Factor 1.19	Tension Load (Kips)	Tension Strength (Kips) 514	Tension Design Factor 4.73 J

Prepared

Helen Sadik-Macdonald

Div of Oil, Gas & Minerals

Phone: 801-538-5357 FAX: 801-359-3940

Date: November 1,2006 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2300 ft, a mud weight of 9 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:

2006-11 Petro Hunt Lamb Trust 31B-1-1

Operator:

Petro-Canada Resources (USA)

String type:

Intermediate

Project ID:

43-039-30034

Location:

Sanpete County

**Design parameters:** 

**Collapse** 

Mud weight: Design is based on evacuated pipe.

10.800 ppg

Minimum design factors:

Collapse: Design factor

1.125

**Environment:** 

H2S considered? Surface temperature: No 75 °F

Bottom hole temperature: Temperature gradient:

185 °F 1.40 °F/100ft

Minimum section length: 1,500 ft

**Burst:** 

Design factor

1.00

1.80 (J)

1.80 (J)

1.60 (J)

Cement top:

3,243 ft

**Burst** 

Max anticipated surface

No backup mud specified.

pressure:

3,354 psi

Internal gradient: Calculated BHP

0.220 psi/ft

5,081 psi

**Tension:** 

8 Round STC:

**Buttress:** Premium:

Body yield:

8 Round LTC:

1.50 (J) 1.50 (B)

Tension is based on buoyed weight. Neutral point: 6,570 ft

Re subsequent strings:

Non-directional string.

Next setting depth: Next mud weight:

11,200 ft 10.000 ppg Next setting BHP: 5,818 psi Fracture mud wt: 19.250 ppg

Fracture depth: Injection pressure:

7,850 ft 7,850 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	7850	9.625	53.50	P-110	LT&C	7850	7850	8.5	3118.9
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	4404		1.805	5081	10900	2.15	352	1422	4 05 .1

Prepared

Helen Sadik-Macdonald Div of Oil, Gas & Minerals Phone: 801-538-5280 FAX: 801-359-3940

Date: November 1,2006 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 7850 ft, a mud weight of 10.8 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:

2006-11 Petro Hunt Lamb Trust 31B-1-1

Operator:

Petro-Canada Resources (USA)

String type:

**Drilling Liner** 

Project ID:

43-039-30034

Location:

Sanpete County

**Environment:** 

**Design parameters:** 

**Collapse** 

Mud weight:

10.000 ppg

Design is based on evacuated pipe.

Minimum design factors:

Collapse: Design factor

1.125

H2S considered?

Surface temperature:

No 75 °F

Bottom hole temperature: Temperature gradient:

232 °F 1.40 °F/100ft

Minimum section length: 1,500 ft

**Burst:** 

Design factor

1.00

1.80 (J)

1.80 (J)

1.60 (J)

Cement top:

7,841 ft

**Burst** 

Max anticipated surface

No backup mud specified.

pressure: Internal gradient:

Calculated BHP

4,402 psi

0.220 psi/ft 6,866 psi

Tension:

8 Round STC: 8 Round LTC:

**Buttress:** Premium:

1.50 (J) Body yield: 1.50 (B)

Tension is based on buoyed weight. Neutral point: 10,634 ft

Liner top:

7,350 ft

Non-directional string.

Re subsequent strings:

Next setting depth: Next mud weight: Next setting BHP:

14,700 ft 10.000 ppg 7,636 psi

Fracture mud wt: Fracture depth: Injection pressure: 19.250 ppg 11,200 ft 11,200 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (Ibs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	3800	7.625	39.00	Q-125	HD-L	11200	11200	6.5	909.7
Run Seq	Collapse Load (psi) 5818	Collapse Strength (psi) 12060	Collapse Design Factor 2.073	Burst Load (psi) 6866	Burst Strength (psi) 14340	Burst Design Factor 2.09	Tension Load (Kips)	Tension Strength (Kips) 867	Tension Design Factor 6.88 J

Prepared

Helen Sadik-Macdonald Div of Oil, Gas & Minerals Phone: 801-538-5280 FAX: 801-359-3940

Date: November 1,2006 Salt Lake City, Utah

Remarks:

For this liner string, the top is rounded to the nearest 100 ft. Collapse is based on a vertical depth of 11200 ft, a mud weight of 10 ppg. The Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.



2006-11 Petro Hunt Lamb Trust 31B-1-1

Operator:

Petro-Canada Resources (USA)

String type:

Production

Project ID:

43-039-30034

Location:

Sanpete County

Minimum design factors: **Environment:** 

**Collapse** 

Mud weight: Design is based on evacuated pipe.

**Design parameters:** 

Collapse: 10.000 ppg Design factor

1.125

H2S considered?

Surface temperature:

No 75 °F

Bottom hole temperature: Temperature gradient:

Non-directional string.

281 °F 1.40 °F/100ft

Minimum section length: 1,500 ft

Burst:

Design factor

1.00

Cement top:

11,242 ft

**Burst** 

Max anticipated surface

No backup mud specified.

pressure: Internal gradient: Calculated BHP

4,402 psi

0.220 psi/ft 7,636 psi

**Tension:** 

8 Round STC: 1.80 (J) 1.80 (J)

8 Round LTC: **Buttress:** 

Premium: Body yield: 1.50 (J) 1.50 (B)

1.60 (J)

Tension is based on buoyed weight.

Neutral point:

12,475 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	14700	5.5	20.00	L-80	Buttress	14700	14700	4.653	1830.4
Run Seq 1	Collapse Load (psi) 7636	Collapse Strength (psi) 8830	Collapse Design Factor 1.156	Burst Load (psi) 7636	Burst Strength (psi) 8990	Burst Design Factor 1.18	Tension Load (Kips) 249	Tension Strength (Kips) 466	Tension Design Factor 1.87 B

Prepared

Helen Sadik-Macdonald Div of Oil, Gas & Minerals Phone: 801-538-5280 FAX: 801-359-3940

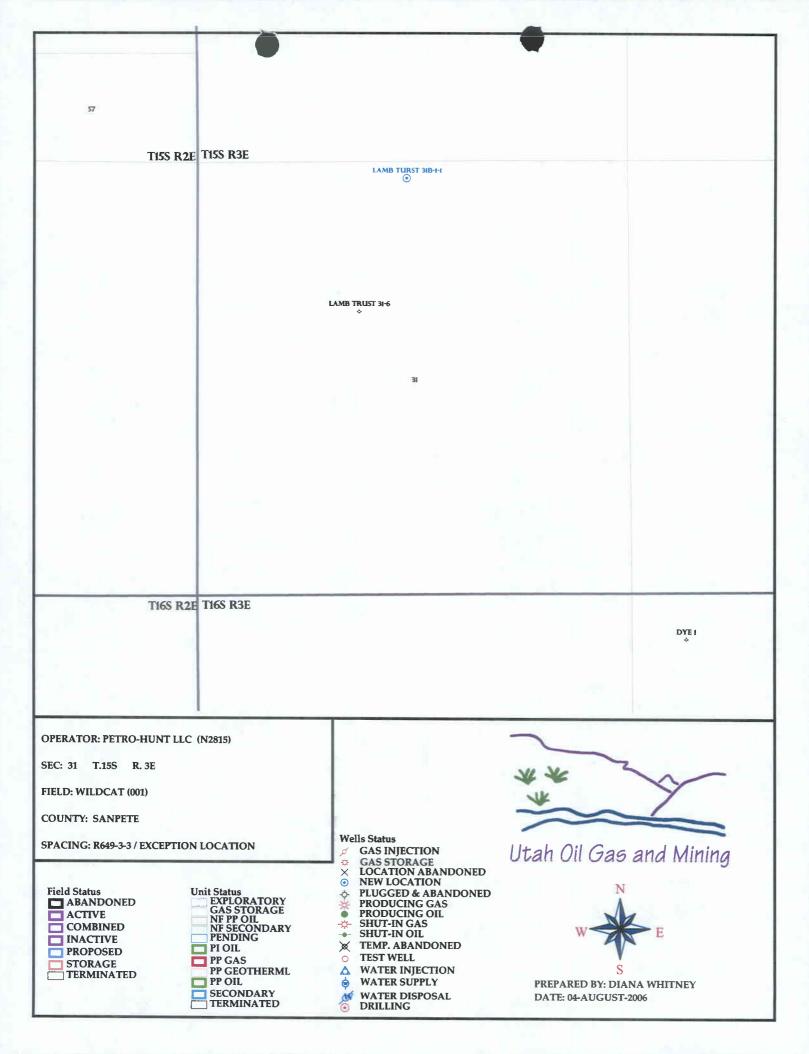
Date: November 1,2006 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 14700 ft, a mud weight of 10 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

APD RECEIVED: 07/20/2006		API NO. ASSIGNED: 43-039-30034						
WELL NAME: LAMB \( \text{Vrist} \) 31B-1-1  OPERATOR: PETRO-HUNT, LLC ( N2815 )  CONTACT: DON HAMILTON		PHONE NUMBER:	701-863-662	2				
PROPOSED LOCATION:		INSPECT LOCATN BY: / /						
NENW 31 150S 030E SURFACE: "712 FNL 2594 FWL		Tech Review	Initials	Date				
BOTTOM: 712 FNL 2594 FWL		Engineering	DRO	1/17/07				
COUNTY: SANPETE LATITUDE: 39.47475 LONGITUDE: -111.6287		Geology						
UTM SURF EASTINGS: 445927 NORTHINGS: 43694	142	Surface						
FIELD NAME: WILDCAT ( 1	)							
LEASE TYPE: 4 - Fee  LEASE NUMBER: FEE  SURFACE OWNER: 4 - Fee		PROPOSED FORMAT		'A				
RECEIVED AND/OR REVIEWED:	LOCATIO	ON AND SITING:						
Plat  Bond: Fed[] Ind[] Sta[] Fee[]  (No. RLN0008181 )  Potash (Y/N)  Oil Shale 190-5 (B) or 190-3 or 190-13  Water Permit  (No. Municipal )  RDCC Review (Y/N)  (Date: 08/19/2006 )  Fee Surf Agreement (Y/N)  Intent to Commingle (Y/N)	Unit: Re Re	649-2-3. 649-3-2. Generaliting: 460 From Qt: 649-3-3. Except rilling Unit Board Cause No: Eff Date: Siting:	r/Qtr & 920' E					
COMMENTS: Needs Presto (O	9-06-2	006)						
STIPULATIONS: 1-Spacer Stop  2- STATEMENT OF BASIS  3- Schoe Gsg Cont Stop								



# **Application for Permit to Drill** Statement of Basis

10/10/2006

## **Utah Division of Oil, Gas and Mining**

Page 1

APD No

API WellNo

Status

Well Type OW

**Surf Ownr** P

**CBM** 

63

43-039-30034-00-00

Surface Owner-APD

No

**Operator** 

PETRO-HUNT, LLC

Well Name LAMB TURST 31B-1-1

Unit

**Field** WILDCAT

Type of Work

Location

NENW 31 15S 3E S 0 F L 0 F L GPS Coord (UTM) 445927E 4369280N

#### **Geologic Statement of Basis**

This location is placed just to the east of the south central portion of the Gunnison Plateau area, near the extreme western edge of the Colorado Plateau physiographic province in western central Utah. Some people have characterized this area as being in the Basin and Range - Colorado Plateau transition zone. It is otherwise characterized as being astride the Sevier Overthrust Belt. The location is on fee land just within a mile to the south of Wales, Utah, and about 1.5 miles west of the San Pitch River in Sanpete County. This location falls about a mile east of the plateau-bounding Wales-Gunnison backthrust fault. A well at this location will spud into a moderately permeable soil developed on Quaternary/Tertiary Coalesced Fan deposits. It is uncertain what strata lie beneath these deposits and no prognosticated tops, other than the Navajo Sandstone pay, are prognosticated by the Operator. Nearly a mile to the west, the nearest mapped exposures below the coalesced fan deposits are of the Jurassic Twist Gulch Formation. The area is in a secondary recharge area about 0.5 mile west of the transition to a valley fill discharge area. Considerable agricultural irrigation is occuring nearby. A significant near surface quality ground water resource exists in this valley with artesian wells within a mile of the location. Aquifers with drinking water quality [600 to 700 mg/l Total Dissolved Solids (TDS)] ground water resources are likely to be encountered. A P&A'd well, about 1.2 miles southeast, encountered two water sands within the first 50' of 24" conductor casing hole. Many underground water rights have been filed within a mile of the location, with wells drilled as deep as 365'. Division personnel have described nearby water wells as being thermal and having 400 to 600 pounds formation pressure. The hole will be drilled with a fresh water and gel mud system to 2,300' TD to set the 13 3/8" surface casing. Formation tops from some nearby P&A'd wells indicate that this may be a reasonable Surface Casing seat into the Arapien Shale if diapiric flow is encountered along the backthrust fault. The intermediate hole will be drilled with a saturated salt mud system. It is anticipated that this mud system is designed to deal with the evaporites of the Arapien Shale. Any water encountered in the Arapien Shale is likely to be of poor quality. A Division of Water Rights publication notes that aquifers in close proximity to the Arapien Shale are also likely to contain ground water with high TDS levels. It is not known where the Base of Moderately Saline Ground Water is but it is not unreasonable to expect a rapid transition from the better quality resource near the surface to ground water with considerably higher Total Dissolved Solids concentrations around Surface Casing depth. A casing, cementing and drilling fluid program as described above should be sufficient to control and isolate the poor quality ground waters expected to be encountered at that depth in a well at this location if sufficient good quality cement is placed to overlap the Surface and Intermediate Casing strings.

Chris Kierst **APD Evaluator**  10/5/2006 Date / Time

#### **Surface Statement of Basis**

Participating in the pre-site evaluation were; M. Jones (UDOGM), John Wunderlick, Ray Lewis (Petro-Hunt), Ron Lamb and Marie Lamb as well as Jeff Lamb (surface ownership representation).Location is staked ~1.0 mile south of Wales, Utah. The location is planned and staked to be built on 2 adjacent parcels of property. The landowners of the west parcel (where the wellbore will be located) is the Ben Glade Lamb Family Living Trust, represented by Jeff Lamb. The east parcel is owned by Ron Lamb. The fence currently seperating the two parcels will be re-routed arround the bottom of the location (to the east). Both landowners are in agreement and cooperation with the operator on this matter. The properties are both used for grazing cattle and other

# **Application for Permit to Drill Statement of Basis**

10/10/2006

## Utah Division of Oil, Gas and Mining

Page 2

agricultural activities. Based on the pit evaluation ranking and score the reserve pit will be required to be lined.

Mark Jones

9/6/2006

**Onsite Evaluator** 

Date / Time

## **Conditions of Approval / Application for Permit to Drill**

Category

Condition

Pits

A synthetic liner with a minimum thickness of 12 mils shall be properly installed and

maintained in the reserve pit.

Surface

The reserve pit shall be fenced upon completion of drilling operations.

Surface

Drainages adjacent to the proposed pad shall be diverted around the location.

#### Utah Division of Oil, Gas and Mining

**Operator** 

PETRO-HUNT, LLC

Well Name

LAMB TURST 31B-1-1

API Number

43-039-30034-0

APD No 63

Field/Unit WILDCAT

Location: 1/4,1/4 NENW

**Sec** 31

Tw 15S Rng 3E

0 FL 0 FL

**GPS Coord (UTM)** 445943

4369279

**Surface Owner** 

#### **Participants**

M. Jones (UDOGM), John Wunderlick, Ray Lewis (Petro-Hunt), Ron Lamb and Marie Lamb as well as Jeff Lamb (surface ownership representation).

#### Regional/Local Setting & Topography

Location is staked ~1.0 mile south of Wales, Utah. The location is planned and staked to be built on 2 adjacent parcels of property. The landowners of the west parcel (where the wellbore will be located) is the Ben Glade Lamb Family Living Trust, represented by Jeff Lamb. The east parcel is owned by Ron Lamb. The fence currently seperating the two parcels will be re-routed arround the bottom of the location (to the east). Both landowners are in agreement and cooperation with the operator on this matter. The properties are both used for grazing cattle and other agricultural activities.

#### Surface Use Plan

**Current Surface Use** 

Agricultural

Grazing

New Road

Miles Well Pad

**Src Const Material** 

**Surface Formation** 

0

Width 300

Length 430

Onsite

Ancillary Facilities N

#### Waste Management Plan Adequate?

#### **Environmental Parameters**

#### Affected Floodplains and/or Wetland Y

small dry wash drainages begin to develop near proposed location.

#### Flora / Fauna

Sagebrush / June grass community.

#### Soil Type and Characteristics

clay loam

**Erosion Issues** N

Sedimentation Issues N

Site Stability Issues N

#### **Drainage Diverson Required** Y

all drainages should be diverted away from wellpad.

#### Berm Required? N

#### Erosion Sedimentation Control Required? N

Paleo Survey Run? N Paleo Potental Observed? N Cultural Survey Run? N Cultural Resources? N

#### Reserve Pit

Site-Specific Factors	ite-Specific Factors				
Distance to Groundwater (feet)	>200		0		
Distance to Surface Water (feet)	>1000		0		
Dist. Nearest Municipal Well (ft)	1320 to 5280		5		
Distance to Other Wells (feet)	300 to 1320		10		
Native Soil Type	Mod permeability		10		
Fluid Type	TDS>10000		15		
Drill Cuttings	Salt or Detrimental		10		
<b>Annual Precipitation (inches)</b>	10 to 20		5		
Affected Populations	>50		10		
<b>Presence Nearby Utility Conduits</b>	Unknown		10		
		<b>Final Score</b>	75	1	Sensitivity Level

#### **Characteristics / Requirements**

dugout earthen (90' x 205' x 14'). Lined.

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 12 Pit Underlayment Required? N

#### **Other Observations / Comments**

Mark Jones
Evaluator

9/6/2006

Date / Time

utah gab

Online Services Agency List

Business

Google

Search Utah.go GO

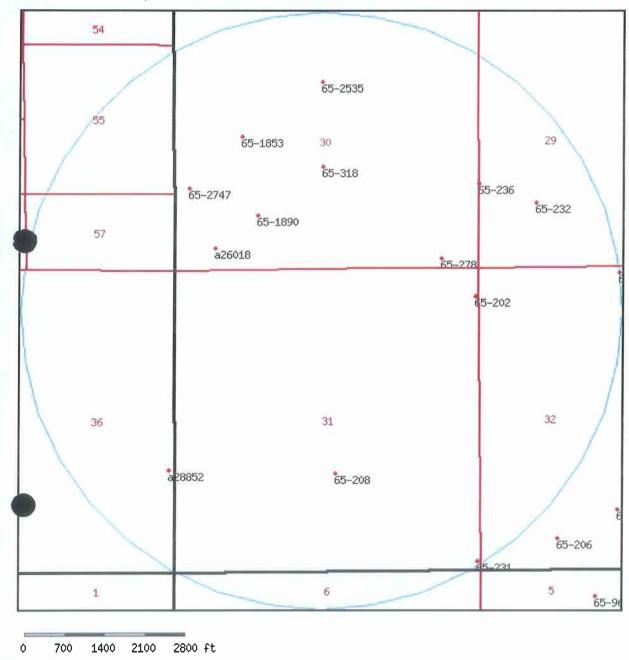
# UTAH DIVISION OF WATER RIGHTS

## **WRPLAT Program Output Listing**

Version: 2004.12.30.00

Rundate: 10/05/2006 05:40 PM

Radius search of 5280 feet from a point S712 E2584 from the NW corner, section 31, Township 15S, Range 3E, SL b&m Criteria:wrtypes=W,C,E podtypes=all status=U,A,P usetypes=all



Water Rights

	<i>'</i>					
WR Number	Diversion Type/Location	Well Log	Status	Priority U	ses CFS ACFT	Owner Name
<u>65-1612</u>	Underground	<u>well</u> <u>info</u>	P	19690324 S	0.009 0.000	GRETA M. DAVIS
	S103 W200 N4 32 15S 3E SL					P.O. BOX 4262
65-1853	Underground		P	19760601 IS	0.015 0.000	ROBERT R. JACKMAN
	N2374 E1154 SW 30 15S 3E SL					P.O. BOX 647
65-1890	Underground		P	19770325 DI	IS 0.015 0.000	P.S.A. AND SONS INCORPORATED
	N970 E1440 SW 30 15S 3E SL					C/O PAUL D. ANDERSON (MANAGER)
65-202	Underground		P	19520505 S	0.015 0.000	LOUIS U. MUMFORD
	S495 W66 NE 31 15S 3E SL					WALES UT 84667
65-204	Underground		P	19520515 S	0.015 0.000	LAWRENCE THOMAS
	N1073 E2393 SW 32 15S 3E SL					WALES UT 84667
65-206	Underground		P	19520522 S	0.015 0.000	H. RICHARD THOMAS
	N571 E1332 SW 32 15S 3E SL					SANTA ROSA CA
<u>65-208</u>	Underground		P	19520710 S	0.015 0.000	NEWEL F. REESE
	N1716 W2574 SE 31 15S 3E SL					WALES UT 84667
65-231	Underground		P	19530526 S	0.015 0.000	RALPH WASHBURN
	N165 W66 SE 31 15S 3E SL					WALES UT 84667
<u>65-232</u>	Underground		P	19530606 S	0.015 0.000	LLOYD PRICE
	N1155 E990 SW 29 15S 3E SL					WALES UT 84667
65-236	Underground		P	19530925 S	0.015 0.000	LLOYD PRICE
	N1485 0 SW 29 15S 3E SL					WALES UT 84667
65-2535	Underground	well info	P	18580000 IM	<b>IS</b> 0.410 47.250	TOWN OF WALES

	N3332 E2559 SW 30 15S 3E SL					P.O. BOX 4262
65-2747	Underground	well info	A	19960821 DIS	0.015 0.000	KARL S. AND LESLIE CLAWSON
	N1450 E250 SW 30 15S 3E SL					P.O. BOX 4235
65-278	Underground		P	19550910 S	0.015 0.000	DAVID C. REES
	N165 W660 SE 30 15S 3E SL					WALES UT 84667
65-318	Underground		P	19580129 D	0.015 0.000	NEWEL FRANK AND EUNICE L. REES
	S3465 E2640 NW 30 15S 3E SL					94 W. 100 N.
65-963	Underground		P	19000000 DS	0.004 0.000	MILTON BEAL
	S482 W678 N4 05 16S 3E SL					C/O JOHN S. BEAL
a26018	Underground	well info	A	20011004 O	0.003 0.500	KARL AND LESLIE CLAWSON
	N400 E700 SW 30 15S 3E SL					P.O. BOX 4235
a28852	Underground	well info	A	20040409 DI	0.002 1.000	CECIL AND LIZ CLAWSON
	N1815 W100 SE 36 15S 2E SL					P.O. BOX 4191

Natural Resources | Contact | Disclaimer | Privacy Policy | Accessibility Policy

#### **STATE ACTIONS**

## Resource Development Coordinating Committee Governor's Office of Planning and Budget

## 5110 State Office Building

**SLC, UT 84114** 

Phone No. 537-9230

1.	State	Agen	cy
----	-------	------	----

Oil, Gas and Mining 1594 West North Temple, Suite 1210 Salt Lake City, UT 84114-5801 2. Approximate date project will start:

Upon Approval or August 18, 2006

### 3. Title of proposed action:

Application for Permit to Drill

## 4. Description of Project:

Petro-Hunt, LLC proposes to drill the Lamb Trust 31B-1-1 well (wildcat) on a Fee lease Fee, Sanpete County, Utah. This action is being presented to the RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this action and must issue approval before operations commence.

5. Location and detailed map of land affected (site location map required, electronic GIS map preferred)

(include UTM coordinates where possible) (indicate county)

178' FNL 2590' FWL, NE/4 NW/4,

Section 31, Township 15 South, Range 3 East, Sanpete County, Utah

6. Possible significant impacts likely to occur:

Surface impacts include up to five acres of surface disturbance during the drilling and completion phase (estimated for five weeks duration). If oil and gas in commercial quantities is discovered, the location will be reclaimed back to a net disturbance of between one and two acres – not including road, pipeline, or utility infrastructure. If no oil or gas is discovered, the location will be completely reclaimed.

- 7. Identify local government affected
  - a. Has the government been contacted? No.
  - b. When?
  - c. What was the response?
  - d. If no response, how is the local government(s) likely to be impacted?
- 8. For acquisitions of land or interests in land by DWR or State Parks please identify state representative and state senator for the project area. Name and phone number of state representative, state senator near project site, if applicable:
  - a. Has the representative and senator been contacted? N/A
- 9. Areawide clearinghouse(s) receiving state action: (to be sent out by agency in block 1)
  Six County Association of Governments

<b>LO.</b> .	For	further	information,	contact:
--------------	-----	---------	--------------	----------

11. Signature and title of authorized officer

Diana Whitney

**Phone:** (801) 538-5312

for Gil Hunt, Associate Director

Don Status

**Date:** August 4, 2006

## SURFACE DAMAGE AGREEMENT

This Agreement is between, of THE BEN D. LAMB AND ANITA J. LAMB FAMILY REVOCABLE LIVING TRUST, heremafter referred to a "Lessor", whose address is HC 13 Box 4205, Wales, UT 84667 and Petro-Hunt, L.L.C., heremafter referred to as "Operator", whose address is Suite 3400; 1601 Elm Street; Dallas, Texas 75201

#### The above parties agree to the basic understanding as follows:

Prior to the commencement of any drilling operation by Operator on any land in Sanpete County, Utah on which Lessor owns surface rights ("Subject Lands"), Operator shall make the following payments as full and complete compensation for damage to the surface:

• \$500 per acre for each drill-site location and its associated access road

Operator's use of, and access to, the Subject Lands is at its own cost and risk. Operator agrees to bear all liabilities caused by its operations. A copy of Operator's State of Utah Blanket Bond in the amount of up to \$120,000 is attached hereto as Exhibit 'A'. Operator's proof of liability insurance will be furnished to Lessor.

- Operator shall obtain Lessor's consent to the location of all access roads, which consent shall not be unreasonably withheld. Access roads shall not exceed 30 feet in width. All pipelines, power lines, and telephone lines that will be permanent will be buried below plow depth and mapped unless otherwise agreed. In the event of a dry hole, the drill site and roadways will be restored as required by law to as near as original condition as possible, or to Lessor's specifications. Lessor herby gives its consent to the approximate location of the access road for the Lamb Trust 31B as depicted on the plat attached hereto as Exhibit "B".it
- (2) Unauthorized personnel, contractors, etc. will not have access to or be allowed on any drilling locations hereunder. Operator will make a reasonable effort to have a company representative on the location at all times during drilling/completion operations. Firearms, liquor, and drugs shall be prohibited from all well locations and access roads covered by this agreement.
- (3) Operator will reimburse Lessor for loss, damage, mjury or death of Lessor's livestock caused by or directly related to Operator's exploration and production of oil or gas on any lands covered by this agreement. Operator will recompense Lessor at a fair market value plus associated replacement costs, if any relative to any livestock covered by this paragraph 3.
- (4) Operator will not bring permanent electric utilities onto the subject Property without first receiving written approval from the Lessor, which shall not be unreasonably withheld.
- (5) Unless otherwise agreed, Operator will at all times keep all fencing and gates within the vicinity of the roads and the drilling site utilized by the Operator under this agreement in a condition suitable to contain livestock.

## PROPERTY RECLAMATION AGREEMENT

- 1. All topsoil will be stripped, stockpiled, and then replaced to support re-vegetation.
- 2. Ditches, and culverts, gates, cattle guards will be returned as nearly as possible to original condition as required by law.
- 3. Reclamation work will be accomplished in a timely manner. Natural causes such as unusual weather conditions or ground settling or other force majeure events may delay reclamation.

RECEIVED

4. All construction and maintenance costs relating to roads, drill pads, equipment and facilities hereunder shall be born by Operator.

This agreement shall be binding upon Operator and Lessor, their respective heirs, executors, administrators, successors, and assigns and upon Operator, its executors, administrators, successors, and assigns. This agreement pertains to only to all surface areas owned by Lessor which may be disturbed in exploration and/or development by Operator, its contractors, subcontractors and/or designees.

Dated this 18th day of July, 2006.

Lessor and Surface Owner:

THE BEN D. LAMB AND ANITA J. LAMB FAMILY REVOCABLE TRUST

Ron Lamb, as Power of Attorney for Anita J. Lamb, aka Anita J. Carter

Operator Petro-Hur

James F. Clarke, Vice President

ΝM

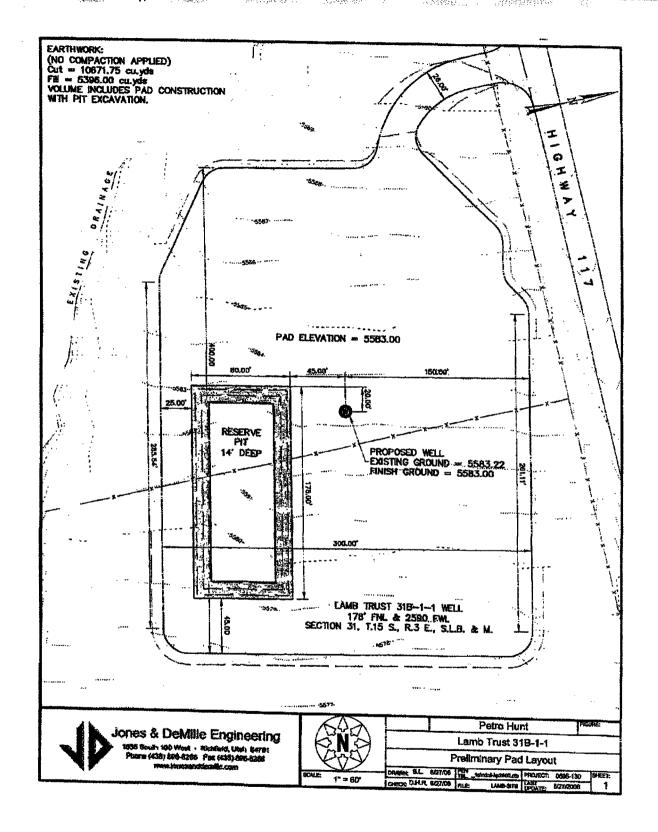
Exhibit "A"

Attached to and made a part, that certain Surface Damage Agreement dated <u>July 12, 2006</u> between The Ben D. Lamb and Anita J. Lamb Family Revocable Living Trust and Petro-Hunt, L.L.C. covering lands in Sanpete County, Utah.

		TMENT OF NATURAL RESOURCES
Bond No. RLB0008181 DI	VISIO	ON OF OIL, GAS AND MINING
		SURETY BOND
KNOW ALL MEN BY THESE PRESENTS:		
That we (operator name) <u>Petro-Hunt</u>	<b>L</b> ,1	L.Cas Principal,
(surety name) RLI Insurance Coa	man	v
		as Surety, duly authorized and firmly bound unto the State of Utah in the sum of:
One Hundres Twenty Thousand	and	d no/100 dellars (\$ 120,000.00)
		dollars (\$ 120,000,000,000,000 or of the Division of Oil, Gas and Mining, as agent of the State of Utah, for the use and such we bind ourselves, our heirs, executors, administrators and successors jointly and
		AT, WHEREAS the Principal is or will be engaged in the drilling, redrilling, deepening, a well or wells and restoring the well site or sites in the State of Utah for the purposes of fluids in connection therewith for the following described land or well:
X Blanket Bond: To cover all	wells	drilled in the State of Utah
Individual Bond: Well No:		
		Township: Range:
		Uah
and well alte restoration then this obligation is vol	d; othe	Il comply with all the provisions of the laws of the State of Utah and the rules, orders and State of Utah, including, but not limited to the proper plugging and abandonment of wells arwise, the same shall be and remain in full force and effect a subscribed its name and has caused this instrument to be signed by its duly authorized in the contract of the contract
(Corporate or Notary Seal here)	]	
		Principal (company name)
	Ву	Name (print)
		Tavelon
Attastee:Date:	}	Signature
N TESTIMONY WHEREOF, said Surely has caus to be affixed this	ed this	s instrument to be signed by its duly authorized officers and its corporate or notary seal
19th day of May		
		Surety Company (Attach Power of Attorney)
(Corporate or Notery Seal here)	Ву	
	!   	Name (print) Title
		Signature State of the Control of th
Attestes: Date:	]	8 Greenway Plaza, Surre 40B Surely Maling Address
	-	Houston 17046
5/2012/)		City State Zip

Exhibit "B"

Attached to and made a part of that certain Surface Damage Agreement dated July 18, 2006 between The Ben D. Lamb and Anita J. Lamb Family Revocable Living Trust and Petro-Hunt, L.L.C. covering lands in Sanpete County, Utah:



From:

Robert Clark Whitney, Diana

To: Date:

8/14/2006 10:34:14 AM

Subject:

RDCC short turn around responses

esponses

43.0394. Duce

The following comments are provided in response to short turn around items RDCC #6916 through RDCC #6921, and RDCC #6943.

RDCC #6916, Comments begin: The proposal of Enduring Resources, LLC to drill the Southam Canyon 10-25-34-32 wildcat well, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . Comments end. RDCC #6917. Comments begin: The proposal of Enduring Resources, LLC to drill the Southam Canyon 10-25-14-32 wildcat well, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. The proposed project is also subject to Utah Air Quality Rule R307-205-5. Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at

www.rules.utah.gov/publicat/code/r307/r307.htm . Comments end. RDCC #6918, Comments begin: The proposal of Enduring Resources, LLC to drill the Southam Canyon 10-25-11-32 wildcat well, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at <a href="http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf">http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf</a>. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at

www.rules.utah.gov/publicat/code/r307/r307.htm . Comments end. RDCC #6919, Comments begin: The proposal of the Houston Exploration Company to drill the North Horseshoe 5-16-6-22 wildcat well, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for



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esponses

www.rules.utah.gov/publicat/code/r307/r307.htm . Comments end. RDCC #6920, Comments begin: The proposal of Petro-Hunt, LLC to drill the Vonda H. Christensen Family LP 35A-3-1 wildcat well, in Sanpete County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at <a href="http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf">http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf</a>. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at

www.rules.utah.gov/publicat/code/r307/r307.htm . Comments end. RDCC #6921, Comments begin: The proposal of Petro-Hunt, LLC to drill the Lamb Trust 31B-1-1 wildcat well, in Sanpete County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . Comments end. RDCC #6943, Comments begin: The proposal of Enduring Resources, LLC to drill the Long Draw 12-24-31-26 wildcat well, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The quidelines for preparing an NOI are available on-line at

http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . Comments end. Robert ClarkDivision of Air Quality536-4435

CC: Mcneill, Dave; Wright, Carolyn

13.039-30034

**MEMORANDUM** 

DATE:

August 15, 2006

TO:

Utah Division of Oil, Gas and Mining, Forestry, Fire, and State

Lands, and Resource Development Coordinating Committee

FROM:

Utah Geological Survey, Ground Water and Paleontology Program

SUBJECT:

UGS comments on RDCC items 6916, 6917, 6918, 6919, 6920,

6921, 6922, and 6943.

6916. Division of Oil, Gas and Mining # ML-47065 Short Turn Around; Sec. 32, T10S, R25E Uintah Co.

Omian Co.

Application for Permit to Drill - proposal to drill a wildcat well the Southam Canyon 10-25-34-32 on a State lease ML-47065

Although there are no paleontological localities recorded in our files in this project area, it is mapped as T3 (Eocene Uinta and Duchesne River Formations) on the Utah State Geological Map. The Uinta and Duchesne River Formations are among the most paleontological sensitive rock units in Utah and have a strong potential for yielding significant vertebrate fossil localities. The office of the State paleontologist therefore recommends that a paleontological survey be conducted for this project and its easements.

6917. Division of Oil, Gas and Mining Short Turn Around;; Sec. 32, T10S, R25E Uintah Co.

Application for Permit to Drill - proposal to drill a wildcat well the Southam Canyon 10-25-14-32 on a State lease ML-47065

Although there are no paleontological localities recorded in our files in this project area, it is mapped as T3 (Eocene Uinta and Duchesne River Formations) on the Utah State Geological Map. The Uinta and Duchesne River Formations are among the most paleontological sensitive rock units in Utah and have a strong potential for yielding significant vertebrate fossil localities. The office of the State paleontologist therefore recommends that a paleontological survey be conducted for this project and its easements.

6918. Division of Oil, Gas and Mining Short Turn Around; Sec. 32, T10S, R25E Uintah Co.

Application for Permit to Drill - proposal to drill the Southam Canyon 10-25-11-32 on a State lease ML-47065

Although there are no paleontological localities recorded in our files in this project area, it is mapped as T3 (Eocene Uinta and Duchesne River Formations) on the Utah State Geological Map. The Uinta and Duchesne River Formations are among the most paleontological sensitive rock units in Utah and have a strong potential for yielding significant vertebrate fossil localities. The office of the State paleontologist therefore recommends that a paleontological survey be conducted for this project and its easements.

6919. Division of Oil, Gas and Mining Short Turn Around; Sec. 16, T6S, R22E Uintah Co.

Application for Permit to Drill - proposal to drill a wildcat well the North Horseshoe 5-16-6-22 on a State lease ML-47969

Although there are no paleontological localities recorded in our files in this project area, it is mapped as T3 (Eocene Uinta and Duchesne River Formations) on the Utah State Geological Map. The Uinta and Duchesne River Formations are among the most paleontological sensitive rock units in Utah and have a strong potential for yielding significant vertebrate fossil localities. The office of the State paleontologist therefore recommends that a paleontological survey be conducted for this project and its easements.

6920. Division of Oil, Gas and Mining Short Turn Around; Sec. 35, T16S, R2E Sanpete Co.

Application for Permit to Drill - proposal to drill a wildcat well the Vonda H. Christ. Fam. 35A-3-1 on a Fee lease

Although there are no paleontological localities recorded in our files in this project area, it is mapped as T3 (Eocene Uinta and Duchesne River Formations) on the Utah State Geological Map. The Uinta and Duchesne River Formations are among the most paleontological sensitive rock units in Utah and have a strong potential for yielding significant vertebrate fossil localities. The office of the State paleontologist therefore recommends that a paleontological survey be conducted for this project and its easements.

6921. Division of Oil, Gas and Mining Short Turn Around; Sec. 31, T15S, R3E Sanpete Co.

Application for Permit to Drill - proposal to drill a wildcat well the Lamb Trust 31B-1-1 on a Fee lease Fee

Although there are no paleontological localities recorded in our files in this project area, it is mapped as T3 (Eocene Uinta and Duchesne River Formations) on the Utah State Geological Map. The Uinta and Duchesne River Formations are among the most paleontological sensitive rock units in Utah and have a strong potential for yielding significant vertebrate fossil localities. The office of the State paleontologist therefore recommends that a paleontological survey be conducted for this project and its

easements..

6922. Trust Lands Administration Other Proposed Actions; State Land Proposals Sec. 16, T10S, R18E; Uintah Co; Easement #1124

Two paleontological localities with vertebrate fossils, Utah Paleontological Localities Un 1699 and Un 1700, are recorded in our files in this project area. The project is mapped as T3 (Eocene Uinta and Duchesne River Formations) on the Utah State Geological Map. The Uinta and Duchesne River Formations are among the most paleontological sensitive rock units in Utah and have a strong potential for yielding significant vertebrate fossil localities. The office of the State paleontologist therefore recommends that a paleontological survey be conducted for this project and its easements and, if these known critical fossil localities are to be impacted, they should be mitigated by a permitted paleontologist.

6943. Division of Forestry, Fire and State Lands Short Turn Around; Drilling Permits; Sec. 26, T12S, R24E Uintah Co.

Application for Permit to Drill - proposal to drill a wildcat well the Long Draw 12-24-31-26 on a State lease ML-47090

Although there are no paleontological localities recorded in our files in this project area, it is mapped as T3 (Eocene Uinta and Duchesne River Formations) on the Utah State Geological Map. The Uinta and Duchesne River Formations are among the most paleontological sensitive rock units in Utah and have a strong potential for yielding significant vertebrate fossil localities. The office of the State paleontologist therefore recommends that a paleontological survey be conducted for this project and its easements.

From:

Carolyn Wright Whitney, Diana

To: Date:

8/21/2006 9:19:50 AM

Subject:

Fwd: RDCC short turn around responses

FYI

>>> Robert Clark 8/14/2006 10:33 AM >>>

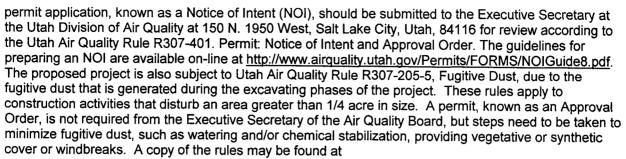
The following comments are provided in response to short turn around items RDCC #6916 through RDCC #6921, and RDCC #6943.

43.03° 30034

RDCC #6916, Comments begin: The proposal of Enduring Resources, LLC to drill the Southam Canyon 10-25-34-32 wildcat well, in Uintah County, may require a permit, known as an Approval Order. from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City. Utah. 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . Comments end. RDCC #6917, Comments begin: The proposal of Enduring Resources, LLC to drill the Southam Canyon 10-25-14-32 wildcat well, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at

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www.rules.utah.gov/publicat/code/r307/r307.htm . Comments end. RDCC #6919, Comments begin: The proposal of the Houston Exploration Company to drill the North Horseshoe 5-16-6-22 wildcat well, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a



www.rules.utah.gov/publicat/code/r307/r307.htm . Comments end. RDCC #6920, Comments begin: The proposal of Petro-Hunt, LLC to drill the Vonda H. Christensen Family LP 35A-3-1 wildcat well, in Sanpete County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at <a href="http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf">http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf</a>. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at

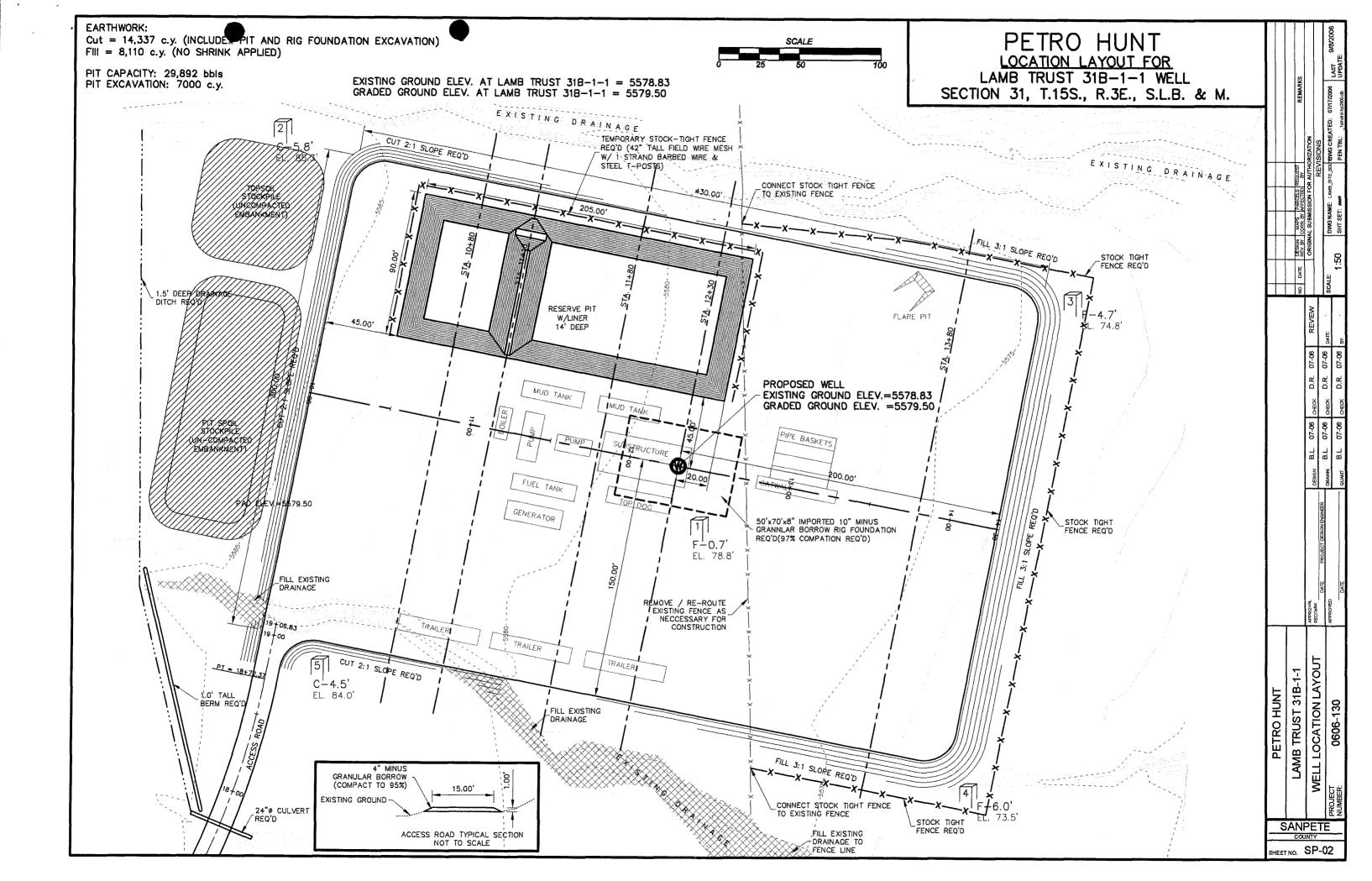
www.rules.utah.gov/publicat/code/r307/r307.htm . Comments end. RDCC #6921, Comments begin: The proposal of Petro-Hunt, LLC to drill the Lamb Trust 31B-1-1 wildcat well, in Sanpete County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . Comments end. RDCC #6943, Comments begin: The proposal of Enduring Resources, LLC to drill the Long Draw 12-24-31-26 wildcat well, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. The proposed project is also subject to

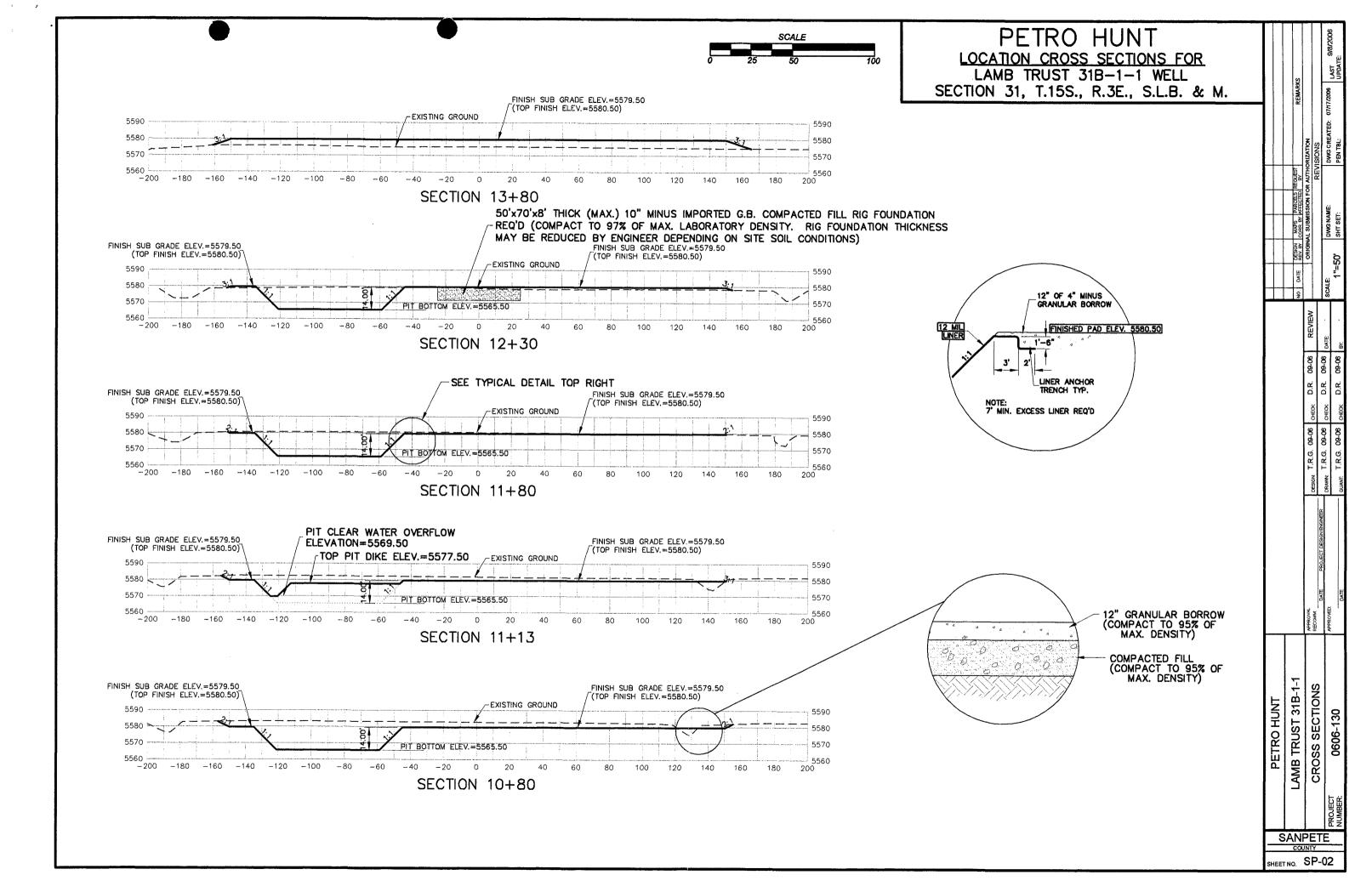
Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at <a href="https://www.rules.utah.gov/publicat/code/r307/r307.htm">www.rules.utah.gov/publicat/code/r307/r307.htm</a>. Comments end. Robert ClarkDivision of Air Quality536-4435

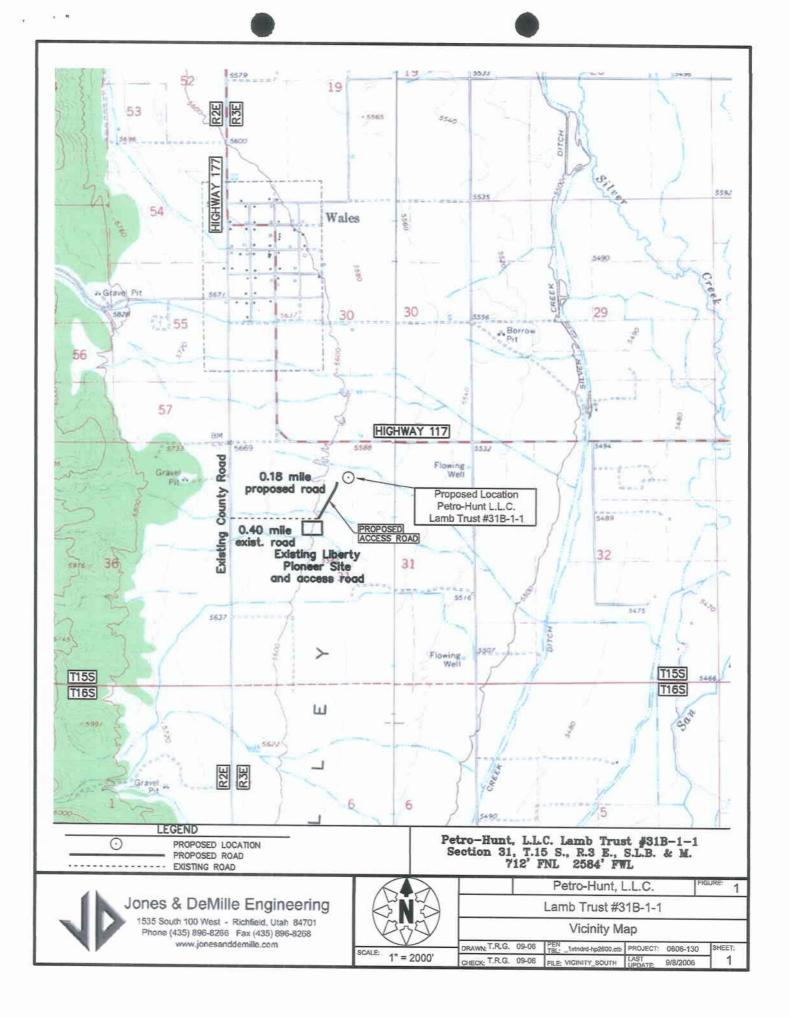
## STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING	Patented	
SUNDRY NOTICES AND REPORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
SUNDRY NOTICES AND REPORTS ON WELLS	N/A	
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	7. UNIT OF CA AGREEMENT NAME: N/A	
1. TYPE OF WELL OIL WELL GAS WELL OTHER	8. WELL NAME and NUMBER: Lamb Trust 31B-1-1	
2. NAME OF OPERATOR: Petro-Hunt, L.L.C.	9. API NUMBER: 4303930034	
3. ADDRESS OF OPERATOR: PHONE NUMBER:	10. FIELD AND POOL, OR WILDCAT:	
258 - 119th Ave. SW CON Killdeer STATE ND 219 58640 (701) 863-6622	Wildcat	
FOOTAGES AT SURFACE: 178' FNL & 2,590' FWL,	COUNTY: Sanpete	
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENW 31 15S 3E S	STATE: UTAH	
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA	
TYPE OF SUBMISSION TYPE OF ACTION		
✓ NOTICE OF INTENT ☐ ACIDIZE ☐ DEEPEN	REPERFORATE CURRENT FORMATION	
(Submit in Duplicate) ALTER CASING FRACTURE TREAT	SIDETRACK TO REPAIR WELL	
Approximate date work will start: CASING REPAIR NEW CONSTRUCTION	TEMPORARILY ABANDON	
10/6/2006 CHANGE TO PREVIOUS PLANS OPERATOR CHANGE	TUBING REPAIR	
CHANGE TUBING PLUG AND ABANDON	VENT OR FLARE	
SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK	WATER DISPOSAL	
(Submit Original Form Only)  CHANGE WELL STATUS  PRODUCTION (START/RESUME)	WATER SHUT-OFF	
Date of work completion:  COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE	OTHER: 534' relocation	
CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION		
Petro-Hunt, L.L.C. requests permission to relocate the surface and bottomhole location for the approval of the previously submitted APD. The new location avoids an exception to space Following is the updated location information for the Lamb Trust 31B-1-1:  Surface & Target Location: 712' FNL & 2,584' FWL, NE/4 NW/4, Section 31, T15S, R3E, SLI Attached please find an updated Form 3 and plat package to replace those previously submit A request for exception to spacing (R649-3-2) is hereby requested based on topography sin of the drilling unit boundary. Petro-Hunt, L.L.C. is the only owner and operator within 460' or along the intended well bore path.	B&M  itted within the APD package.  ace the well is located within 460'  of the proposed well and all points	
ONIONAL		
NAME (PLEASE PRINT) Don Hamilton TITLE Agent for Petro-H	lunt, L.L.C.	
SIGNATURE Don Hamilton DATE 9/12/2006		
(This space for State use only)		

RECEIVED SEP 1 8 2006







#### PETRO-HUNT, L.L.C. 45 West 700 South Ephraim, UT 84627

Phone: (435) 283-2122

Scott Lamb 4309 Boton De Oro NW Albuquerque, New Mexico 87114

Dear Scott:

Agreement between The Ben Glade Lamb Family Living Trust, and Petro-Hunt L.L.C., dated July 12th, 2006. The error lies in paragraph (1) where it states that the Lessor herby gives its consent to the approximate location of the access road for parcels S-25831 and S-25849, also known as the Lamb Trust 31B as depicted on the plat attached to Exhibit "B". In paragraph (1) it should say that the Lessor herby gives us consent to the approximate location of the access roads for parcels S-25828x, S-25830, S-25832, S-25849, S-25851, the rest of the paragraph will remain the same as previously stated. There is a signature block at the bottom of the page, which we ask you to sign if you approve of the changes being made. I am sorry for the inconvenience, and appreciate your cooperation in resolving this issue. A revised page 1 to the agreement is attached for your records.

Thanks,

John Robert Wunderlick

Landman

Agreed and excepted this 2 day of September, 2006

THE BEN GLADE LAMB FAMILY LIVING TRUST

Scott Lamb, Trustee

#### SURFACE DAMAGE AGREEMENT

This Agreement is between, Scott Lamb, Trustee of THE BEN GLADE LAMB FAMILY LIVING TRUST, hereinafter referred to a "Lessor", whose address is 4309 Boton De Oro NW, Albuquerque, New Mexico 87114 and Petro-Hunt, L.L.C., hereinafter referred to as "Operator", whose address is Suite 3400; 1601 Elm Street; Dallas, Texas 75201

#### The above parties agree to the basic understanding as follows:

Prior to the commencement of any drilling operation by Operator on any land in Sanpete County, Utah on which Lessor owns surface rights ("Subject Lands"), Operator shall make the following payments as full and complete compensation for damage to the surface:

\$500 per acre for each drill-site location and its associated access road

Operator's use of, and access to, the Subject Lands is at its own cost and risk. Operator agrees to bear all liabilities caused by its operations. A copy of Operator's State of Utah Blanket Bond in the amount of up to \$120,000 is attached hereto as Exhibit 'A'. Operator's proof of liability insurance will be furnished to Lessor.

- (1) Operator shall obtain Lessor's consent to the location of all access roads, which consent shall not be unreasonably withheld. Access roads shall not exceed 30 feet in width. All pipelines, power lines, and telephone lines that will be permanent will be buried below plow depth and mapped unless otherwise agreed. In the event of a dry hole, the drill site and roadways will be restored as required by law to as near as original condition as possible, or to Lessor's specifications. Lessor herby gives its consent to the approximate location of the access road for parcels S-25828x, S-25830, S-25832, S-25849 and S-25851, also known as the Lamb Trust 31B as depicted on the plat attached hereto as Exhibit "B".
- (2) Unauthorized personnel, contractors, etc. will not have access to or be allowed on any drilling locations hereunder. Operator will make a reasonable effort to have a company representative on the location at all times during drilling/completion operations. Firearms, liquor, and drugs shall be prohibited from all well locations and access roads covered by this agreement.
- (3) Operator will reimburse Lessor for loss, damage, injury or death of Lessor's livestock or Native grass, caused by or directly related to Operator's exploration and production of oil or gas on any lands covered by this agreement. Operator will recompense Lessor at a fair market value plus associated replacement costs, if any relative to any livestock or native grass covered by this paragraph 3.
- (4) Operator will not bring permanent electric utilities onto the subject Property without first receiving written approval from the Lessor, which shall not be unreasonably withheld.
- (5) Unless otherwise agreed, Operator will at all times keep all fencing and gates within the vicinity of the roads and the drilling site utilized by the Operator under this agreement in a condition suitable to contain livestock.

#### PROPERTY RECLAMATION AGREEMENT

1. All topsoil will be stripped, stockpiled, and then replaced to support re-vegetation.

... . ,

- 2. Ditches, and culverts, gates, cattle guards will be returned as nearly as possible to original condition as required by law.
- Reclamation work will be accomplished in a timely manner. Natural causes such as unusual weather conditions or ground settling or other force majeure events may delay reclamation.

#### DRILLING PLAN

#### APPROVAL OF OPERATIONS

#### **Attachment for Permit to Drill**

Name of Operator: Petro-Hunt, L. L. C.

Address:

1601 Elm Street, Suite 3400

Dallas, Tx 75201-7254

Well Location:

Lamb Trust 31B-1-1 Sanpete County, UT

GEOLOGIC SURFACE FORMATION

Tertiary Undivided

#### 2 ESTIMATED DEPTHS OF IMPORTANT GEOLOGIC MARKERS

<u>Formation</u>	Depth MD
Jurassic Twist Gulch	2,120'
Wales Backthrust	2,720'
Jurassic Arapien	7,460'
Jurassic Upper Twin Creek	8,0201
Jurassic Lower Twin Creek	8,640'
Jurassic Navajo	9,140
Thrust	10,300
Jurassic Upper Twin Creek	10,300'
Jurassic Lower Twin Creek	10,540
Jurassic Navajo	11,080'
Thrust	13,600`
Jurassic Lower Twin Creek	13,600'
Jurassic Navajo	13,640"

#### 3 ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS

<u>Formation</u>	<u>Depth</u>	Type		
Jurassic Lower Twin Creek	8,640	Oil		
Jurassic Navajo	9,140'	Oil		
Jurassic Lower Twin Creek	10,540	Oil		
Jurassic Navajo	11,080'	Oil		
Jurassic Lower Twin Creek	13,600	Oil		
Jurassic Navajo	13,640'	Oil		

#### 4. PROPOSED CASING PROGRAM

All casing used to drill this well will be new easing

Type	Size	<u>Weight</u>	<u>Grade</u>	Conn.	Top	Bottom	<u>Hole</u>
Surface	13-3/8"	54.5 ppf	J-55	STC	0,	2,300'	17-1/2"
Intermediate	9-5/8"	53 5 ppf	P-110	LTC	0'	7,850'	12-1/4"
Drilling Liner	7-5/8"	39 0 ppf	Q-125	HDL.	7.350"	11,200'	8-1/2"
Production	5-1/2"	20 0 ppf	L-80	BTC/LTC/HDL	0,	14,700	6-1/2"

#### LAMB TRUST 31B-1-1 SANPETE COUNTY, UTAH DRILLING PLAN

Note: The drilled depth of the surface hole and the setting depth of the surface casing may vary from 2,000' to 2,300'. Should a lost circulation zone be encountered while drilling, casing will be set approximately 300' below the lost circulation zone. If no lost circulation zone is encountered, casing to be set at 2,300'±

#### 5. OPERATOR'S MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

Surface hole: No BOPE will be utilized. Air foam mist, rotating head and diverter system may be utilized.

Intermediate & Drilling Liner hole: Prior to drilling out the surface casing shoe, intermediate and drilling liner, 10,000 psi rams and 5,000 psi annular will be installed. The pipe rams will be operated at least once per day from surface to total depth if operations permit. The blind rams will be functioned once per day from surface to total depth if operations permit.

A diagram of the planned BOP equipment for normal drilling operations in this area is attached. There will be two valves and one check valve on the kill line, two valves on the choke line, and an adjustable choke on the manifold system. The BOP "stack" will consist of three BOP rams (2 pipe, 1 blind), rated to 10,000 psi working pressure and one annular type preventer, rated to a minimum of 5,000 psi working pressure.

The BOP equipment will be pressure tested prior to drilling out surface casing shoe and anytime a new casing string is set All test pressures will be maintained for five (5) minutes without any significant pressure decrease. Clear water will be circulated into the BOP stack and lines prior to pressure testing. The following test pressures will be used as a minimum for various equipment items.

ł	Annular BOP	3,500 psi
2	Ram type BOP	5,000 psi
3.	Kill line valves	5,000 psi
4	Choke line valves and choke manifold valves	5,000 psi
<b>5</b> .	Chokes	5,000 psi
6.	Casing, casinghead & weld	1,500 psi
7	Upper kelly cock and safety valve	5,000 psi
8.	Dart valve	5,000 psi

#### MUD SYSTEMS

- A freshwater / gel system will be used to drill the surface hole
- · A salt saturated mud system will be used to drill well thru the anticipated salt section
- A lignosulfonate system will be used to drill the well below the salt section to total depth
- The mud system will be monitored manually/visually

<u>Depths</u>	Mud Weight (ppg)	Mud System
0' - 2,300'	8.4 - 9.0	Freshwater / gel system.
2,300' - 7,850'	90-108	Saturated salt mud system
7,850 - 11,200'	90-100	Lignosulfonate mud system
11,200' - 14,700'	100	Lignosulfonate mud system

#### 7 AUXILIARY EQUIPMENT TO BE USED

- a Kelly cock
- b Full opening valve with drill pipe connection will be kept on floor Valve will be used when the kelly is not in string.

#### 8 TESTING. LOGGING, AND CORING PROGRAMS TO BE FOLLOWED

- · A drillstem test in the Navajo is possible
- · Four electric wireline logs will be runs from total depth to surface are anticipated for this well
- · The gamma ray will be left on to record from total depth to surface
- · Other log curves (resistivity, porosity, and caliper) will record from total depth to surface
- · A dipmeter and rotary sidewall cores may be run over selected intervals

#### ANTICIPATED ABNORMAL PRESSURES OR TEMPERATURES EXPECTED

- Expected BHP 5,000 5,400 psi (approximately equal to normal pressure gradient)
- · No abnormal temperature or pressures are anticipated
- The formations to be penetrated do not contain known H2S gas

#### LAMB TRUST 31B-1-1 SANPETE COUNTY, UTAH **DRILLING PLAN**

#### 10 WATER SUPPLY

- A water pipeline may be laid for this well Local water wells will be used. Water well permit numbers will be provided as necessary.
- A water well may be drilled for this well and will be permitted in accordance with regulatory requirements

#### 11 **CEMENT SYSTEMS\***

#### Surface Cement:

- Drill 17-1/2" hole to 2,300'±, run and cement 13-3/8" to surface (depth to vary based on depth of lost circulation
- Pump 20 bbls fresh water spacer. Displace with mud
- Casing to be run with: a) float shoe b) float collar c) twelve (12) centralizers, two on the first joint and one per joint for the next ten joints d) bottom two joints thread locked f) pump job with top and bottom plugs.
- Cement the casing annulus to surface. Top out job to be performed if needed, a 1" tubing string may or may not be utilized

					<u>Hole</u>	Cement
Type	<u>Sacks</u>	<u>Interval</u>	<u>Density</u>	<u>Yield</u>	Volume	Volume
Lead	950	0'-1,800'	12.5 ppg	1 98 CFS	1250 CF	1881 CF
Tail	485	1,800'-2,300'	15.8 ppg	1 16 CFS	347CF	562 CF
Top Out	100	0'-100'	15.8 ppg	1.17 CFS	69 CF	117 CF

Surface design volumes based on 50% excess of gauge hole. (Typical design, subject to change)

Lead Mix:

50/50 Poz Premium + 8% gel + 10% Cal-Seal + 25#/sx Flocele

Slurry yield:

1.98 cf/sack Slurry weight: 125 #/gal

Water requirement:

10.50 gal/sack

4 99 gal/sack

5.02 gal/sack

Tail Mix:

Premium + 1% CaCl + 25 #/sx Flocele

Slurry yield: 1.16 cf/sack

Slurry weight:

15 80 #/gal

Top Out:

Water requirement: Premium + 2% CaCl

Water requirement:

Slurry yield:

1 17 cf/sack Slurry weight:

15 80 #/gal

#### Ъ. Intermediate Casing Cement:

- Drill 12-1/4" hole to 7,850' ±, run and cement 9-5/8"
- Pump 20 bbl 5% KCL water. Displace with salt saturated mud
- Casing to be run with: a) float shoe b) float collar c) twelve (12) centralizers, two on the first joint and one per joint for the next ten joints d) bottom two joints thread locked f) pump job with top and bottom plugs.

					Hole	Cement
Type	<u>Sacks</u>	<u>Interval</u>	<u>Density</u>	<u>Yield</u>	<u>Volume</u>	<u>Volume</u>
Lead	1555	1500'-7,850'	13 0 ppg	1.71 CFS	2017 CF	2659 CF

Intermediate design volumes are estimates based on 35% excess of gauge hole. Actual volumes will be calculated from caliper log to bring cement to 800' above 13 3/8" surface casing shoe + 15% excess. (Typical design, subject to change)

Lead Mix:

50/50 Poz + 3% gel + .3% D-Air + 15% salt + .4% Halad R567 + .25 #/sx Flocele + 5 #/sx gilsonite + .2%

CFR#

Slurry yield:

1.71 cf/sack

Slurry weight:

13 0 #/gal

Water requirement:

7.90 gal/sack

#### LAMB TRUST 31B-1-1 SANPETE COUNTY, UTAH <u>DRILLING PLAN</u>

#### Drilling Liner Cement:

- Drill 8-1/2" hole to 11,200' ±, run and cement 7-5/8" liner
- Pump 30 bbl 10.0 ppg Tuned spacer.
- Displace with lignosulfonate mud.

					<u>Hole</u>	<u>Cement</u>
Type	<u>Sacks</u>	<u>Interval</u>	<u>Density</u>	<u>Yield</u>	<u>Volume</u>	<u>Volume</u>
Lead	480	7,150' 11,200'	14 35 ppg	1 24 CFS	281 CF	595 CF

Drilling liner design volumes are estimates based on 35% excess of gauge hole. Actual volumes will be calculated from caliper log to bring lead cement to 700' above 9 5/8" intermediate casing shoe + 15% excess. (Typical design, subject to change)

Lead Mix:

50/50 Poz + 1% HR5 + 3% Halad R344 + 4% Microbond HT

Slurry yield:

1.24 cf/sack

Slurry weight:

14 35 #/gal.

Water requirement:

5 45 gal/sack

#### d Production Casing Cement:

- Drill 6-1/2" hole to 14,700' ±, run and cement 5 1/2" production casing
- Pump 30 bbl 12 0 ppg Tuned spacer.
- Displace with 2% KC completion fluid.

					Hole	Cement
Type	<u>Sacks</u>	<u>Interval</u>	Density	<u>Yield</u>	<u>Volume</u>	Volume
Lead	300	10,000'- 14,700'	14.3 ppg	1.43 CFS	318 CF	429 CF

Production design volumes are estimates based on 35% excess of gauge hole. Actual volumes will be calculated from caliper log to bring lead cement to 1200' above 7 5/8" drilling liner shoe + 15% excess. (Typical design, subject to change)

Lead Mix:

50/50 Poz + 3% CFR3 + 2% HR5 + 3% Halad R344 + 20% SSA-1

Slurry yield:

1 43 cf/sack

Slurry weight:

14 3 #/gal

Water requirement: 6 18 gal/sack

#### 12 ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS

Starting Date:

May 1, 2007

Duration:

90 Days

<sup>\*</sup> Actual cement designs may vary dependent upon selected vendor, casing depths, temperatures and well conditions



#### **CASING DESIGN CHART**

WELL: FIELD: LAMB TRUST 318-1-1 WILDCAT - SANDPETE COUNTY, UT

DEEP WELL

06/20/08

E i

	1 1		1	LENGTH	Dittes	BETTING	est.	CORRS	EDT.	EST.	EST.	CALC	WT SH	ALFE	COLLA	OHITAN BRO	TENS, 6	HTONARI	
SIZE	WIET	GRADE	COM	SECTION	DEPTH TVD	DEPTH	WT.	PSUFF	MW-Jppp	FRAC, ORAD, PPG	GRAD GRAD	PAESS	DECTION 1000 LBB	CUMM 1000 LBS	100%	ADJUSTED TEXNIE	JOHN THE	1000 L D 3	BURS
20"	.25" wall	В	P,Ę.	80	В0	80											-		
13 3/8"	54.50	J55	STC	2300	2300	2300	9	0,468	0,432	12.2	0.10	1076	125	125	1130	1130	514	853	273
9 5/8"	53.50	P110	LTC	7850	7858	7850	10.8	0.562	0.525	14.9	0.10	4409	420	420	7950	7950	1422	1710	1090
7 SIA" CONT. LIVIR	39.00	Q125	HDL	3850	11200	11290	10	0,520	0.484	17.5	0.15	5824	150	150	12060	12050	867	1399	1434
5 1/2" TOP SECTION	20.00	L80	втс	3000	3000	3000	10	0,520	0,484	N/A	0.15	1560	60	294	8830	8830	503	466	910
5 1/2" MID. SECTION	20.00	L60	LTC	8200	11200	11200	10	0.520	0.484	N/A	0.15	5824	164	234	8830	<b>8830</b>	416	456	919
5 1/2" BTM SECTION	20,00	L80	HDL	3500	14760	14700	10	0.520	0.484	N/A	0.15	7644	70	70	8830	8830	240	486	919
2 718" Tbg	6.50	LB0	EUE	14000	14600	14000	10	0.520	0,484	N/A	0.15	7280	91	91	11170	11170	145	145	112

		DAFETY F	erons		1					
		DRILLING		PROD.						
	COL	TENS	BUMIST	OUNTY	ASP	ASP	philip	P##	C30	CPLO
SIZE	1.100	1.600	1.200	1,200	DRLG	PROD	BODY	I, D.	I. D,	O. D.
13 3/8"	1.335	4.101	2.22	N/A	1229	NIA	12.459	12.615	12.515	14.375
9 5/8"	2.968	3,386	17,30	1.987	630	5487	Sp Dft 8.500	8.535	B.535	10,625
7 5/8" CONT. LIFR	4.435	5.774	5.27	2.613	2720	5487	6,5	6.551	6.625	7.625
5 1/2" TOP SECTION	7.955	1,585	N/A	1.875	N/A	5487	4.653	4.778	4.778	6.050
5 1/2" MID SECTION	2.131	1.778	N/A	1.675	N/A	5487	4,653	4.778	4.778	6.050
5 1/2" BTM SECTION	1.623	3.429	N/A	1.675	N/A	5487	4.653	4,699	4.778	5.500
2 3/8" Tbg	2.156	1,593	Ν/A	2.041	NIA	5487	2.347	2.441	2.441	3.668
SHP = MUD WT	HP = MUD WT @ TD - 0.7 PPG X .DS2 X TVD =						7109			***************************************

# PETRO HUNT L. L. C. PROPOSED DRILLING PROCEDURE LAMB TRUST 31B-1-1

WILDCAT SANPETE COUNTY, UT 7/7/06 Revision #2

SURFACE LOCATION: 712' FNL AND 2584' FWL OF SEC 31, T 15 S, R 3 E

BTM HOLE LOCATION: SAME AS ABOVE

THIS DRILLING PROCEDURE HAS BEEN PROPOSED IN CONSIDERATION OF AND WITH RESPECT GIVEN TO THE MANY VARIABLES AND POTENTIAL PROBLEMS THAT MAY BE ENCOUNTERED IN THE DRILLING OF THIS WELL IN THIS GEOGRAPHICAL AREA. THEREFORE, THIS PROCEDURE IS TO SERVE AS A GENERAL GUIDELINE FOR THE DRILLING OF THIS WELL AND WILL BE REVIEWED AND MODIFIED WHEN REQUIRED AS DETERMINED BY ACTUAL WELLBORE CONDITIONS ENCOUNTERED IN THE DRILLING OPERATIONS. SAFETY AND PRUDENT DRILLING PRACTICES WILL TAKE PRIORITY AT ALL TIMES.

PETRO HUNT L. L. C. WILL ISOLATE ALL FRESH WATER, OIL AND / OR GAS BEARING INTERVALS WITH OIL WELL CEMENT AND / OR CASING.

ON ALL TRIPS, WHEN THE DRILL PIPE IS OUT OF THE HOLE, FUNCTION TEST THE BOP'S AND RECORD SAME ON IADC TOUR REPORTS.

- 1. MIRU drilling rig. Install location sign in compliance with DOGM regulations on the derrick or in a conspicuous place near the well. We will utilize a lined earthen reserve pit. Insure the rig is completely rigged up prior to accepting the rig on daywork. The 20" x .25" conductor will be set prior to moving the rig on location to a depth of 80'.
- 2. Notify DOGM within 24 hours of spudding the well and 24 hr prior to testing BOP's or any casing string. Install bell nipple and flowline.

Note: Rig up mudlogging unit prior to spud.

- 3. PU 17 1/2" BHA, spud well and drill 17 1/2" hole to 2,300 RKB. Take surveys every 250' while drilling. Circulate hole clean and pull out of the hole.
- 4. Rig up and log.
- 5. Trip in the hole with 17 1/2" bit. Circulate hole clean and pull out of the hole to run casing.
- 6. Rig up casing tools. Pick up float shoe, 2 joints 13 3/8" 54.5# J55 STC casing and float collar. Run 13 3/8" 54.5# J55 STC casing to 2,300' RKB.

#### Lamb Trust 31B-1-1 Drilling Procedure

- 7. Rig up cementing head and circulate. Cement casing as per attached cementing procedure. Do not overdisplace cement by more than ½ the volume of the shoe track. Bump plug with 500 psi over late pumping pressure. Check to insure floats are holding. Wait on cement 6 hours. Notify DOGM 24 hr prior to testing BOP's.
- 8. Rig down casing tools. Cut window in 20" conductor pipe and make rough cut on 13 3/8" casing. Make final cut on 13 3/8" casing and install 13 3/8" SOW x 13 5/8" 3M starting head. Test head to 50% collapse rating of the 13 3/8" casing.
- 9. NU DSA and BOP stack. Install pipe rams on top & bottom and blinds in middle ram. Test BOP's rams with 5,000 psi and annular with 3500 psi.
- 10. Pick up 12 1/4" BHA and trip in the hole to float collar. Test 13 3/8" casing with 1,250 psi for 30 minutes (MASP = 1229 psi). Notify DOGM 24 hr prior to testing all casing strings.
- 11. Drill float equipment, cement and 5' of new formation. Circulate bottoms up and perform formation integrity test with pump truck to 11.5 ppg EMW. Anticipated fracture gradient at this depth is 12.2 ppg. Convert mud to salt saturated mud system.
- 12. Drill 12 1/4" hole to intermediate casing point at +/-7,850' RKB, taking MWD surveys every 100'. This casing point is intended to be +/-200' below the base of the salt. Circulate and condition hole to run casing. Pull out of hole (SLMOH).
- 13. Rig up lubricator and log.
- 14. Trip in the hole with 12 1/4" bit. Circulate hole clean and pull out of the hole to run casing.
- 15. Rig up casing tools. Pick up float shoe, 2 joints 9 5/8" 53.5# P110 LTC casing and float collar. Run 9 5/8" 53.5# P110 LTC casing to 7,850' RKB.
- 16. Rig up cementing head and circulate. Cement casing as per attached cementing procedure. Final cement volume may be determined by hole caliper results. Do not overdisplace cement by more than ½ the volume of the shoe track. Bump plug with 1,000 psi over late pumping pressure. Check to insure floats are holding. Notify DOGM 24 hr prior to testing BOP's.
- 17. Pick up stack with stack-lifter and set full weight of casing on slips. Make a rough cut and final cut on 9 5/8" casing. NU casing spool and test spool to 50% collapse rating of the 9 5/8" casing. NU DSA and BOP's.
- 18. Test BOP's rams with 5,000 psi and annular with 3,500 psi. The MASP at this point is 2352 psi. Utilize nipple up and test crew.
- 19. Trip in the hole with 8 ½" to the float collar and test 9 5/8" casing with 3,550 psi for 30 minutes (the hydrostatic of the 10.0 ppg mud in the casing + 3,550 psi exceeds 70% of the burst rating of the 9 5/8" casing). Notify DOGM 24 hr prior to testing all casing strings.

#### Lamb Trust 31B-1-1 Drilling Procedure

- 20. Drill float equipment, cement and 5' of new formation. Circulate bottoms up and perform formation integrity test with pump truck to 12.0 ppg EMW. Anticipated fracture gradient at this depth is 14.9 ppg.
- 21. Drill 8 1/2" hole to +/- 11,200' RKB, taking surveys with MWD every 100'. Circulate and condition hole for logging. Pull out of the hole (SLMOH).
- 22. Rig up lubricator and log.
- 23. Trip in the hole with 8 1/2" bit. Circulate hole clean and pull out of the hole to run casing.
- 24. Rig up casing tools. Pick up float shoe, 1 joint 7 5/8" casing, float collar, 1 joint of 7 5/8" casing and landing collar. Finish making up 7 5/8" 39.0# Q125 HDL liner with 500' lap. Make up liner hanger and run liner to TD on drill pipe.
- 25. Rig up cementing head and circulate. Hang off liner and cement as per attached cementing procedure. Do not overdisplace cement by more than ½ the volume of the shoe track. Bump plug with 1,000 psi over late pumping pressure. Check to insure floats are holding. Test liner top with 1500 psi, reverse out on top of liner and pull out of hole with setting tool. Notify DOGM 24 hr prior to testing all casing strings.
- 26. Test BOP's rams with 5,000 psi and annular with 3,500 psi.
- 27. Trip in the hole with 6 ½" BHA, picking up 3 ½" stinger. Test 7 5/8" liner and 9 5/8" casing with 1,850 psi for 30 minutes (the hydrostatic of the 10.0 ppg fluid in the casing + 1,850 psi, exceeds 70% of the burst rating of the 9 5/8" casing). Notify DOGM 24 hr prior to testing all casing strings.
- 28. Drill float equipment, cement and 5' of new formation. Circulate bottoms up and perform formation integrity test with pump truck to 13.0 ppg EMW. Anticipated fracture gradient at this depth is 17.5 ppg.
- 29. Drill 6 1/2" hole to +/- 14,700' RKB, taking surveys with MWD every 100'. Circulate and condition hole for logging. Pull out of the hole (SLMOH).
- 30. Rig up lubricator and log. Evaluate well.
- 31. Completion procedure or P & A procedure will follow as needed.

# EXHIBIT "E" Multipoint Surface Use Plan

Attached to UDOGM Form 3
Petro-Hunt, L.L.C.
Lamb Trust 31B-1-1
712' FNL & 2,584' FWL,, NE/4 NW/4
Section 31, T15S, R3E, SLB&M, Sanpete County, Utah

The dirt contractor will be provided with an approved copy of this document prior to initiating construction.

A private surface use agreement is necessary prior to initiating construction.

#### 1. Existing Roads

- a. Access to the well site will utilize the existing county road under Sanpete County Road Department maintenance (See Exhibit "B") in which approval to encroach is in place at this time.
- b. The existing county road will not be upgraded but the existing Liberty-Pioneer encroachment will be utilized where the proposed access to the well leaves the county surface.
- c. We do not plan to change, alter or improve upon any other existing state or county roads.
- d. All existing roads will be maintained and kept in good repair during all phases of operation.
- e. Vehicle operators will obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions.
- f. Since no improvements are anticipated to any State or County access roads no topsoil striping will occur.

#### 2. Planned Access Roads

a. From the existing County Road an access is proposed trending 0.4 miles east along the existing Liberty-Pioneer access road on Lamb surface.

- b. Approximately 0.18 miles of access across Lamb surface is proposed to the well site. The 0.18 miles of access trends northeast and consists of entirely new disturbance and crosses no significant drainages.
- c. A road design plan is not anticipated at this time.
- d. The proposed access road will consist of a 24' travel surface within a 30' disturbed area across Lamb Trust surface.
- e. DOGM approval to construct and utilize the proposed access road is requested with this application.
- f. A maximum grade of 10% will be maintained throughout the project with no major cuts and fills anticipated.
- g. No turnouts are proposed since the access road is only 0.58 miles long and adequate sight distance exists in all directions.
- h. No low water crossings and one 18" culvert is anticipated where the new road leaves the county surface. Adequate drainage structures will be incorporated into the remainder of the road.
- i. No surfacing material will come from federal or State lands.
- j. A gate and cattleguard structure is anticipated as the access road crosses the state road right-of-way fence.
- k. Surface disturbance and vehicular travel will be limited to the approved location access road.
- 1. The operator will be responsible for all maintenance of the access road including drainage structures.

#### 3. Location of Existing Wells

- a. There is one existing production well within a one mile radius of the proposed location.
- b. The Lamb Trust #31-6 was drilled previously and is located within the SE/4 NW/4, Section 31, T15S, R3E, SLB&M.

#### 4. Location of Existing and/or Proposed Facilities

a. If the well is deemed productive a sundry notice reflecting the production site layout will be submitted for approval.

b. Rehabilitation of all pad areas not used for production facilities will be made in accordance with landowner stipulations.

#### 5. Location and Type of Water Supply

a. The location and type of water supply has been addressed as #11 within Exhibit "D". (Drilling Plan).

#### 6. Source of Construction Materials

a. Any necessary construction materials needed will be obtained locally from a private source and hauled to the location on existing roads.

#### 7. Methods for handling waste disposal

- a. A small reserve pit will be constructed with a minimum of one-half the total depth below the original ground surface on the lowest point within the pit. The pit will be lined with a synthetic liner. Three sides of the reserve pit will be fenced within 24 hours after completion of construction and the fourth side within 24 hours after drilling operations cease with four strands of barbed wire, or woven wire topped with barbed wire to a height of not less than four feet. The fence will be kept in good repair while the pit is drying.
- b. Following drilling, the liquid waste will be evaporated from the pit and the pit backfilled and returned to natural grade. No liquid hydrocarbons will be discharged to the reserve pit or location.
- c. In the event fluids are produced, any oil will be retained in tanks until sold and any water produced will be retained until its quality can be determined. The quality and quantity of the water will determine the method of disposal.
- d. Trash will be contained in a portable metal container and will be hauled from location periodically and disposed of at an approved disposal site. Chemical toilets will be placed on location and sewage will be disposed of at an appropriate disposal site.

#### 8. Ancillary Facilities

a. We anticipate no need for ancillary facilities with the exception of trailers to be located on the drill site.

#### 9. Well-site Layout

- a. Available topsoil will be removed from the location and stockpiled. The location of the rig, reserve and blooie pits, and drilling support equipment will be located as shown on Exhibit "A", Figure 1 (Location Layout).
- b. A blooie pit will be located 100' from the drill hole. A line will be placed on the surface from the center hole to the blooie pit. The blooie pit will not be lined, but will be fenced on four sides to protect livestock/wildlife.
- c. Access to the well pad will be as shown on the location layout.
- d. Natural runoff will be diverted around the well pad as shown on the location layout.

#### 10. Plans for Restoration of Surface

- All surface areas not required for producing operations will be graded to as near original condition as possible and contoured to maintain possible erosion to a minimum.
- b. Available topsoil will be stockpiled and will be evenly distributed over the disturbed areas and the area will be reseeded as prescribed by the landowner.
- c. Pits and any other area that would present a hazard to wildlife or livestock will be fenced off when the rig is released and removed.
- d. Any oil accumulation on the pit will be removed or overhead flagged as dictated by then existing conditions.
- e. Rehabilitation will commence following completion of the well. Holes will be filled immediately upon release of the drilling rig from the location. If the well-site is to be abandoned, all disturbed areas will be recontoured to the natural contour as is possible.

#### 11. Surface Ownership

- a. The well-site and access road will be constructed on lands owned by:
  - The Ben Glade Lamb Family Living Trust Contact: Scott D. Lamb, Trustee Cell Phone: 505-301-2436 FAX: 505-428-3530

Email: wannagogolfing@hotmail.com Address: 7521 Sunrose Drive. .NW Albuquerque, New Mexico 87120

- b. A surface use agreement is presently in-place and has been submitted as Exhibit 'C'.
- c. The operator shall contact the landowner and the Division of Oil, Gas and Mining 48 hours prior to beginning construction activities.

#### 12. Other Information:

- a. The primary surface use is wildlife habitat and grazing. The nearest dwelling is near Wales approximately ½ mile northwest of the proposed location. The nearest live water is in Silver Creek Ditch approximately 1 mile east.
- b. If there is snow on the ground when construction begins, it will be removed before the soil is disturbed, and piled downhill from the topsoil stockpile location.
- c. The back-slope and fore-slope will be constructed no steeper than 3:1.
- d. All equipment and vehicles will be confined to the access road and well pad.
- e. A complete copy of the approved Application for Permit to Drill (APD) including conditions and stipulations and the surface use agreement shall be on the well-site during construction and drilling operations.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the Division of Oil, Gas & Mining.

#### 13. Company Representative

Mick Homiston Petro-Hunt, L.L.C. 258 – 119<sup>th</sup> Ave. SW Killdeer, ND 58640 701-863-6622

#### **Company Agent**

Don Hamilton
Buys & Associates, Inc
2580 Creekview Road, Moab, Utah 84532
435-718-2018

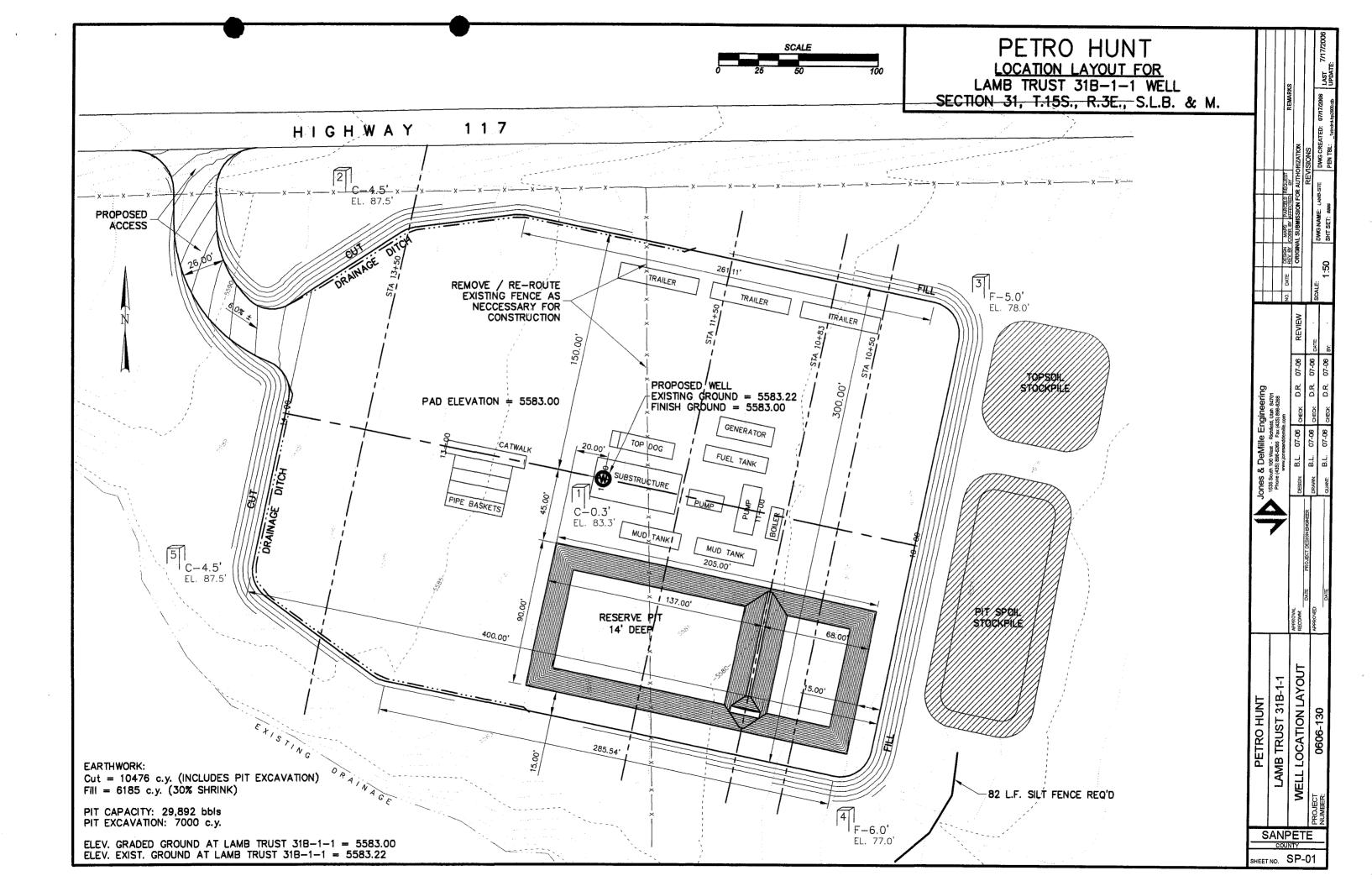
#### 14. Certification

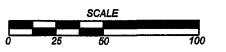
I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct, and that the work associated with the operations proposed herein will be performed by Petro-Hunt, L.L.C. and its subcontractors in conformity with this plan and the terms and conditions under which it is approved.

**9-25-06** Date

Don Hamilton

Agent for Petro-Hunt, L.L.C.





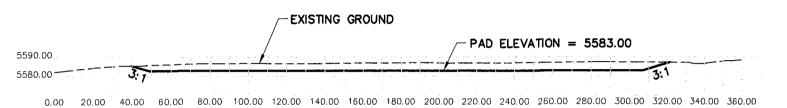
PETRO HUNT
LOCATION CROSS SECTIONS FOR
LAMB TRUST 31B-1-1 WELL
SECTION 31, T.15S., R.3E., S.L.B. & M.

LAMB TRUST 31B-1-1 CROSS SECTIONS

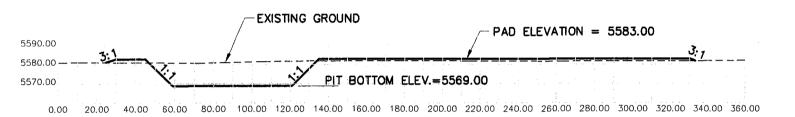
SANPETE

SHEET NO. SP-01

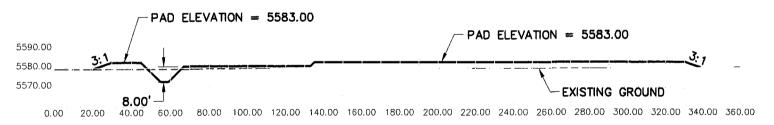
PETRO HUNT



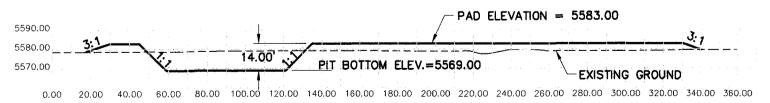
#### SECTION 13+50



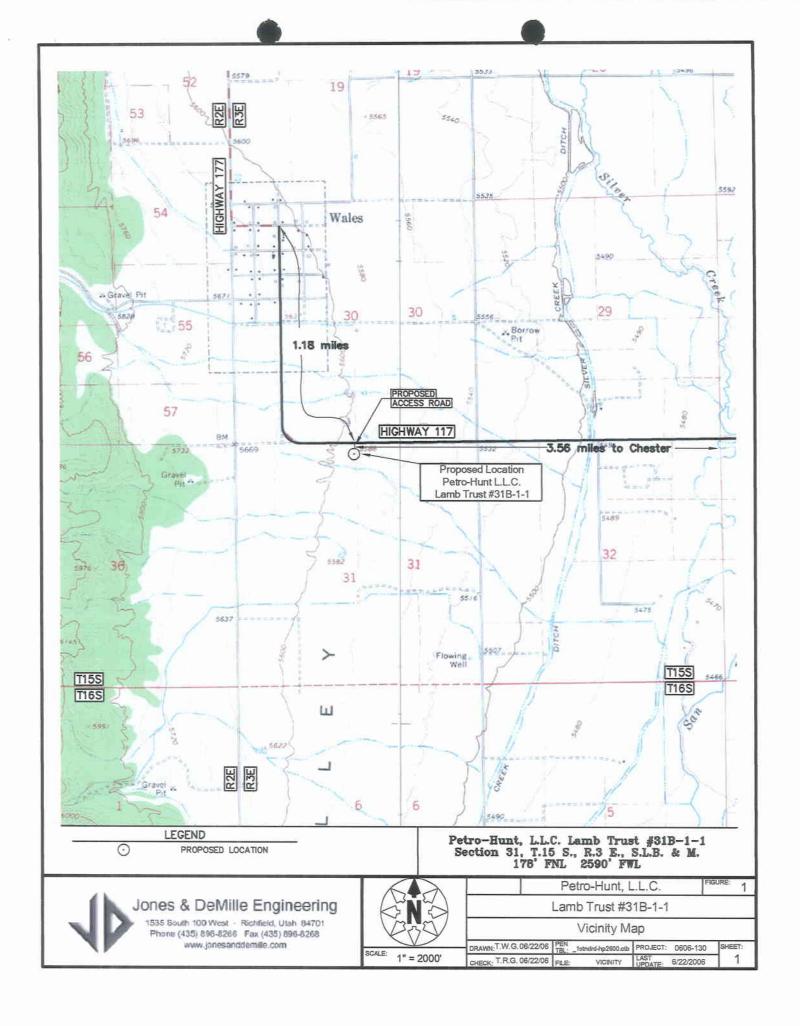
### SECTION 11+50

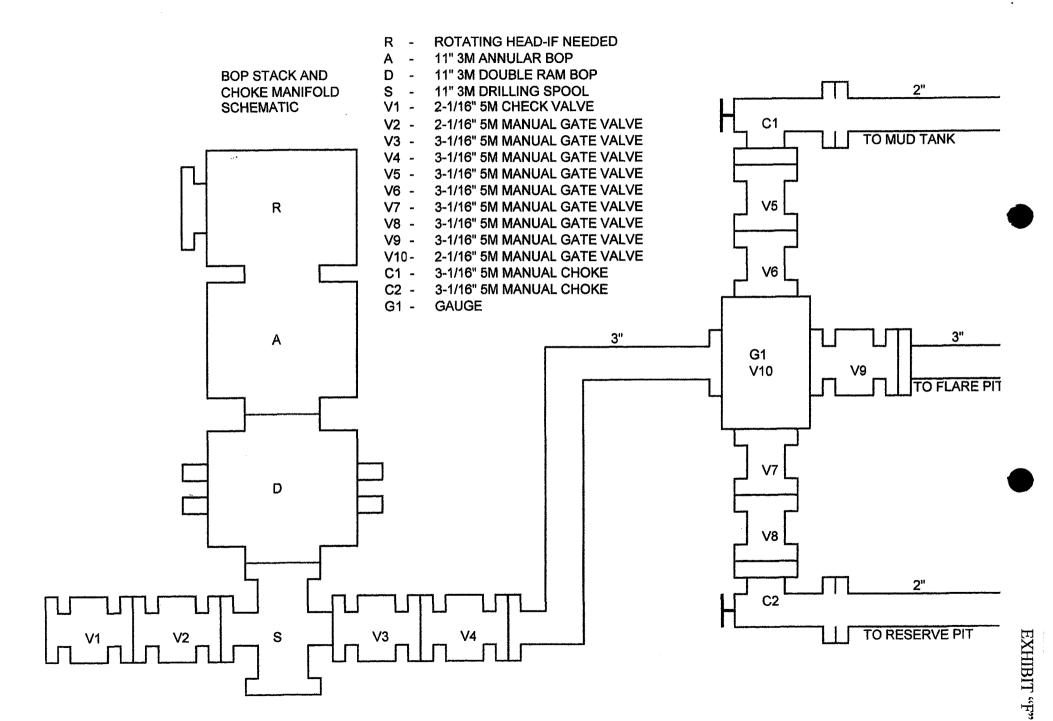


### SECTION 10+83



SECTION 10+50





STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT (highlight changes)

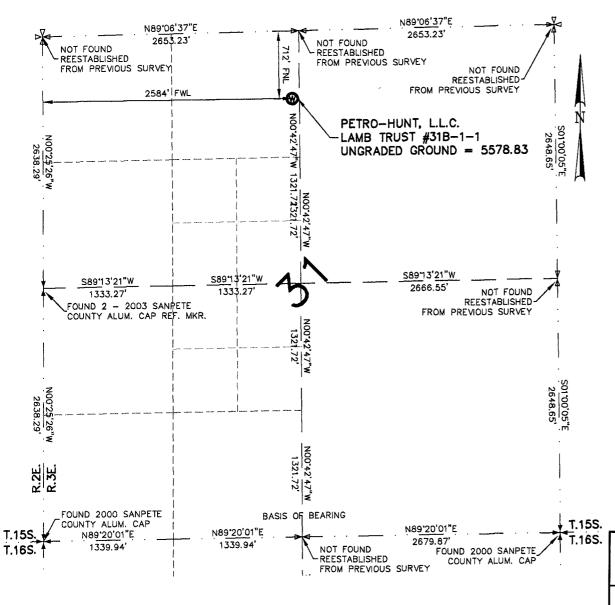
and the second second second second second second second		APPLICA	TION FOR	PERMIT TO	DRILL		5. MINER Paten	AL LEASE NO:	6. SURFACE: Fee		
1A. TYPE OF WO	rk: D	RILL 🔽	REENTER [	DEEPEN			L	AN, ALLOTTEE OR	TRIBE NAME:		
B. TYPE OF WEI	LL: OIL 🗹	GAS 🗌	OTHER	SIN	GLE ZONE MULTIP	LE ZONE	N/A 8. UNIT C N/A	IT CA AGREEMENT N	IAME:		
2. NAME OF OPE		· · · · · · · · · · · · · · · · · · ·		* * * * * * * * * * * * * * * * * * *	· · · · · · · · · · · · · · · · · · ·	<del></del>		NAME and NUMBER	:		
PETRO-HU				·	DI IONE AU ME			B TRUST 31			
258 - 119th	Ave. SW	<sub>c'''</sub> Killde	er str	ND ZIP 580	640 PHONE NUMB (701) 863		Wilds	DAND POOL, OR WI C <b>at</b>	LDCAT:		
4. LOCATION OF	•	•	4459277	<sub>XTE</sub> ND <sub>ZIP</sub> 580 ∠ 39, 473	3587		11. QTR/ MERII	QTR, SECTION, TOV DIAN:	VNSHIP, RANGE,		
			L, 436 9250	1 -111,			NEN	N 31 159	3E S		
AT PROPOSED	PRODUCING ZO	<sub>NE:</sub> 712' FN	IL & 2,584' F\	ML,	1						
			AREST TOWN OR PO	OST OFFICE:			12. COU	NTY:	13. STATE: UTAH		
	s south of \	Sanp									
15. DISTANCE TO	NEAREST PROF	PERTY OR LEASE	LINE (FEET)	16. NUMBER O	FACRES IN LEASE:	21	17. NUMBER OF	ACRES ASSIGNED			
18. DISTANCE TO	NEAREST WELL	20. BOND DESC	PIPTION:	40							
APPLIED FOR None	R) ON THIS LEASE	E (FEET)		19. PROPOSED		4,700		e Surety RLB	0008181		
	(SHOW WHETHE	R DF, RT, GR, ET	C.):	22. APPROXIMA	ATE DATE WORK WILL START:	.,	23. ESTIMATED				
5,579' GR				10/6/200	16		90 days				
24. PROPOSED CASING AND CEMENTING PROGRAM											
SIZE OF HOLE	CASING SIZE,	GRADE, AND WE	GHT PER FOOT	SETTING DEPTH	CEMENT	TYPE, QUA	NTITY, YIELD, AN	D SLURRY WEIGHT			
									THE CONTRACT AND ASSESSMENT OF THE PARTY OF		
26"	20"	.25" w.t.		80	Ready mix to surfac	e	<del></del>		**************************************		
17-1/2"	13-3/8"	J55	54.5#	2,300	50/50 Poz & Premiu	ım 9	50/485 sx	1.98/1.16	12.5/15.8		
12-1/4"	9-5/8"	P110	53.5#	7,850	50/50 Poz		1555 sx	1.71	13.0		
8-1/2"	7-5/8"	Q125	39.0#	11,200	50/50 Poz		480 sx	1.24	14.35		
6-1/2"	5-1/2"	L80	20.0#	14,700	50/50 Poz		300 sx	1.43	14.3		
		·									
25.				ATTA	CHMENTS						
VERIFY THE FOL	LOWING ARE AT	TACHED IN ACCO	RDANCE WITH THE	UTAH OIL AND GAS C	ONSERVATION GENERAL RULE	S:					
WELL PL	AT OR MAP PREF	PARED BY LICENS	ED SURVEYOR OR I	ENGINEER	COMPLETE DRILL	NG PLAN					
<del></del> -			APPROVAL FOR US				PON OD COMBA	NY OTHER THAN TH	IF I FACE CHARTED		
	·				Toking, it of clos	TOKIO PEN	SON OR COMPA	NI OTHER THAN IF	IE LEASE OWNER		
NAME (PLEASE (	PRINT) Don H	lamilton			TITLE Agent for	or Petro	-Hunt, L.L.	С			
SIGNATURE	Do	n Has	milton		DATE 9/12/20	06					
(This space for Star	te use only)										
						A	proved	by the			
	3	12-1-512 -	) a serie			U	tah Divis	ion of			
API NUMBER ASS	SIGNED: $\underline{\mathcal{A}}$	3-034-3	00034	<del></del>	APPROVAL:	Oil,	Gas and	Mining			
									<u></u>		

(11/2001)

(See Instructions on Reverse Side)

Date: 01-15-07

## Section 31, T.15 S., R.3 E., S.L.B. & M.



#### BASIS OF BEARINGS

BASIS OF BEARING USED WAS N89'20'01"E BETWEEN THE SOUTHWEST CORNER AND THE SOUTHEAST CORNER OF SECTION 31, T.15 S., R.3 E., S.L.B. & M. LATITUDE = 39"28'23.6821" (38.473245028) NAD 83 LONGITUDE = -111"37'45.3008" (-111.629250222) NAD 83

#### **PROJECT**

#### Petro-Hunt. L.L.C.

WELL LOCATION, LOCATED AS SHOWN IN THE N.E. 1/4 OF THE N.W. 1/4 OF SECTION 31, T.15 S., R.3 E., S.L.B. & M. SANPETE COUNTY, UTAH

#### LEGEND

► = SECTION CORNERS (LOCATED)

= QUARTER SECTION CORNERS (LOCATED)

= SECTION CORNERS (NOT LOCATED)

→ □ = QUARTER SECTION CORNERS (NOT LOCATED)

= PROPOSED WELL HEAD

NOTE: THE PURPOSE OF THIS SURVEY WAS TO PLAT THE PETRO-HUNT, L.L.C. LAMB TRUST #31B-1-1 LOCATION. LOCATED IN THE N.E. 1/4 OF THE N.W. 1/4 OF SECTION 31, T.15 S., R.3 E., S.L.B. & M., SANPETE COUNTY, UTAH.

#### BASIS OF ELEVATION

ELEVATION BASED ON THE SOUTHWEST CORNER OF SECTION 6, T.16 S., R.3 E., S.L.B. & M. WHICH IS A SANPETE COUNTY ALUM CAP WITH AN ELEVATION OF 5559.00'.



#### CERTIFICATE

THIS IS TO CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION, AND THAT THE SAME ARE TRUE AND





Jones & DeMille Engineering 1535 South 100 West - Richfleld, Utah 84701 Phone (435) 896-8266 Fax (435) 896-8268 www.jonesanddemille.com

#### Well Location Plat for

#### Petro-Hunt, L.L.C. Lamb Trust #31B-1-1

	DESIGNED	SURVEYED	CHECKED	DRAWN	PROJECT NO.	SHEET NO.
		T.W.G.	T.R.G.	T.R.G.		
	DATE		DWG.NAME	SCALE	0606-130	1
1	09/06/06		WELL_LOC.	1"=1000'		



#### State of Utah

#### Department of Natural Resources

MICHAEL R. STYLER Executive Director

Division of Oil, Gas & Mining

JOHN R. BAZA Division Director JON M. HUNTSMAN, JR. Governor

GARY R. HERBERT Lieutenant Governor

January 18, 2007

Petro-Hunt, LLC 258 - 119th Ave., SW Killdeer, ND 58640

Re:

Lamb Trust 31B-1-1 Well, 712' FNL, 2584' FWL, NE NW, Sec. 31, T. 15 South, R. 3 East, Sanpete County, Utah

#### Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-039-30034.

Sincerely,

Gil Hunt

Associate Director

Diet

pab Enclosures

cc:

Sanpete County Assessor

Operator:	Petro-H	unt, LLC			
Well Name & Number	Lamb Trust 31B-1-1				
API Number:	43-039-30034				
Lease:	Fee				
Location: NE NW	Sec. 31	T. 15 South	R. 3 East		

#### **Conditions of Approval**

#### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

#### 2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- 24 hours prior to cementing or testing casing
- 24 hours prior to testing blowout prevention equipment
- 24 hours prior to spudding the well
- within 24 hours of any emergency changes made to the approved drilling program
- prior to commencing operations to plug and abandon the well

The following are Division of Oil, Gas and Mining contacts and their work telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at (801) 538-5338
- Carol Daniels at (801) 538-5284 (spud)

#### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
- 5. Operator shall comply with applicable recommendations resulting from Resource Development Coordinating Committee review. Statements attached.

Page 2 43-039-30034 January 18, 2007

- 6. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.
- 7. Surface casing shall be cemented to the surface.

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439	₩			٠	200		- 1		4	2 2	<u> </u>	

FORM 9

DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER:
SUNDRY NOTICES AND REPORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL OIL WELL AS GAS WELL OTHER	8. WELL NAME and NUMBER: 1 HMB   rus + 3   B-1-1
2. NAME OF OPERATOR:  Petro Hunt LLC	9. API NUMBER:
3. ADDRESS OF OPERATOR: PHONE NUMBER:	43 - 039 - 30034 10. FIELD AND POOL, OR WILDCAT:
258 119th AV. 5 CITY Killdeer STATE NO ZIP 58640 701-863-6622	Wildcat
4. LOCATION OF WELL FOOTAGES AT SURFACE: 7/3' FNL 2584' FWL	county: Sanpete
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NE NU 3/ 155 3E 5	STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPO	PRT, OR OTHER DATA
TYPE OF SUBMISSION TYPE OF ACTION	
NOTICE OF INTENT  ACIDIZE  DEEPEN	REPERFORATE CURRENT FORMATION
(Submit in Duplicate) ALTER CASING FRACTURE TREAT  Approximate date work will start CASING REPAIR NEW CONSTRUCTION	SIDETRACK TO REPAIR WELL
	TEMPORARILY ABANDON
CHANGE TO PREVIOUS PLANS OPERATOR CHANGE  CHANGE TUBING PLUG AND ABANDON	TUBING REPAIR
SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK	VENT OR FLARE WATER DISPOSAL
(Submit Original Form Only)  CHANGE WELL STATUS  PRODUCTION (START/RESUME)	WATER SHUT-OFF
Date of work completion:  COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE	M OTHER: Extension
CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION	LA CINEC EXTENSION
DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volume Scandry For extension of Approved by the Utah Division of Oil, Gas and Mining	e d
Date: 01-07-05  By:	
NAME (PLEASE PRINT) L. M; a hae ( Endrud TITLE Producti's SIGNATURE S. M. M. M. Sald DATE 1-4.	en Manage/

(This space for State use only)

RECEIVED

JAN 07 2008

# **Application for Permit to Drill Request for Permit Extension**

Validation (this form should accompany the Sundry Notice requesting permit extension)

API:

API: $43 \ 039-30034$ Well Name: $4 \ MB \ TRUST \ 3/B-1-1$ Location: $7/2' \ FN/2 \ 2589 \ FUL \ Sec \ 3/ \ 7/55, \ R3E, \ Saape$ Company Permit Issued to: $Peter \ Haat \ LLC$ Date Original Permit Issued: $1-18-07$	te Co, Utal
The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.	ed .
Following is a checklist of some items related to the application, which should verified.	l be
If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes□No⊠	
Have any wells been drilled in the vicinity of the proposed well which would a the spacing or siting requirements for this location? Yes□No⊠	ffect
Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes□Noଢ✓	<b>)</b>
Have there been any changes to the access route including ownership, or riginof-way, which could affect the proposed location? Yes□No ☑	ht-
Has the approved source of water for drilling changed? Yes□No⊡	
Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes□No☑	<b>Э</b>
Is bonding still in place, which covers this proposed well? Yes ⊠No□	
Signature 1-4-08  Date	-
Title: Prod. Manager	,
Representing: Detro Heat LLC	RECEIVED

DIV. OF OIL, GAS & MINING

JAN 07 2008

STATE OF UTAH

	DEPARTMENT OF NATURAL RESOUP DIVISION OF OIL, GAS AND MI		5. LEASE DESIGNATION AND SERIAL NUMBER: PATENTED
SUNDRY	NOTICES AND REPORTS	S ON WELLS	B. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
Do not use this form for proposals to drill ne	w wells, significantly deepen existing wells below cur erals. Use APPLICATION FOR PERMIT TO DRILL (	rent bollom-hole depth. reenter plugged wells, or to	7. UNIT OF CA AGREEMENT NAME: N/A
1 TYPE OF WELL OIL WELL		unio suo populari	8. WELL NAME and NUMBER: RON LAMB 31A-4-1
2 NAME OF OPERATOR:			B. API NUMBER:     4303930034
PETRO-HUNT, L. L. C.  3. ADDRESS OF OPERATOR:	77	PHONE NUMBER:	10 FIELD AND POOL OR WILDCAT:
	KILLDEER STATE ND ZIP	58640 (701) 863-6622	WILDCAT
4 LOCATION OF WELL FOOTAGES AT SURFACE: 1569' F	FNL & 1154' FEL 446 376	× 39.470451	COUNTY: SANPETE
QTR/QTR. SECTION, TOWNSHIP. RANG	43(907) Ge. MERIDIAN: SENE 31 15S 3	* 39.470951 BE 8-111,62343	STATE: UTAH
11. CHECK APPR	ROPRIATE BOXES TO INDICAT	TE NATURE OF NOTICE, REPO	ORT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
NOTICE OF INTENT	ACIDIZE	DEEPEN	REPERFORATE CURRENT FORMATION
(Submit in Duplicate) Approximate date work will start:	ALTER CASING  CASING REPAIR	FRACTURE TREAT  NEW CONSTRUCTION	SIDETRACK TO REPAIR WELL TEMPORARILY ABANDON
10/1/2008	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR
10/1/2000	CHANGE TUBING	PLUG AND ABANDON	VENT OR FLARE
SUBSEQUENT REPORT	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL
(Submit Original Form Only)  Date of work completion:	CHANGE WELL STATUS	PRODUCTION (START/RESUME)	WATER SHUT-OFF
paid of mark completions	COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF WELL SITE	OTHER:
**************************************	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORMATION	
located 1569' FNL & 1154' same. A drilling pad was to on the new location for the	' FEL of Section 31, T15S, R3E, built in preparation to drill the La Ron Lamb 31A-4-1 well. Pleas roposes to drill the Ron Lamb 3 an and BOPE schematic.	S. L. B. & M., Sanpete County, I mb Trust 31B-1-1 well and a port	If will be the Ron Lamb 31A-4-1 well UT. The landowner will remain the tion of those materials will be utilized epth of 16,000' MD. Please see
		COPY SENT TO OPERATOR	
		Date: <u>8.14.2008</u> Initials: <u>14.5</u>	CONFIDENTIAL
NAME (PLEASE PRINT) Cary J. Vio	ce	TITLE Sr. Drilling Engi	neer
SIGNATURE	ry Vie	DATE 6/24/2008	
(This space for State use only)	APPROVED BY THE	N OF	
/	OIL, GAS, AND M	INING	RECEIVED
(5/2000)	DATE: OF 13 TO	furtions on Reverse Side)	<del></del>
F	BY: Trabalally		JUL 0 9 2008
*	Surface (coing shall be ce - Production a sing Shull be Intermodiate shoe (	mented backto surface be comented backinsde t 8000'mb)	DIV. OF OIL, GAS & MINISTO

#### FORM 3

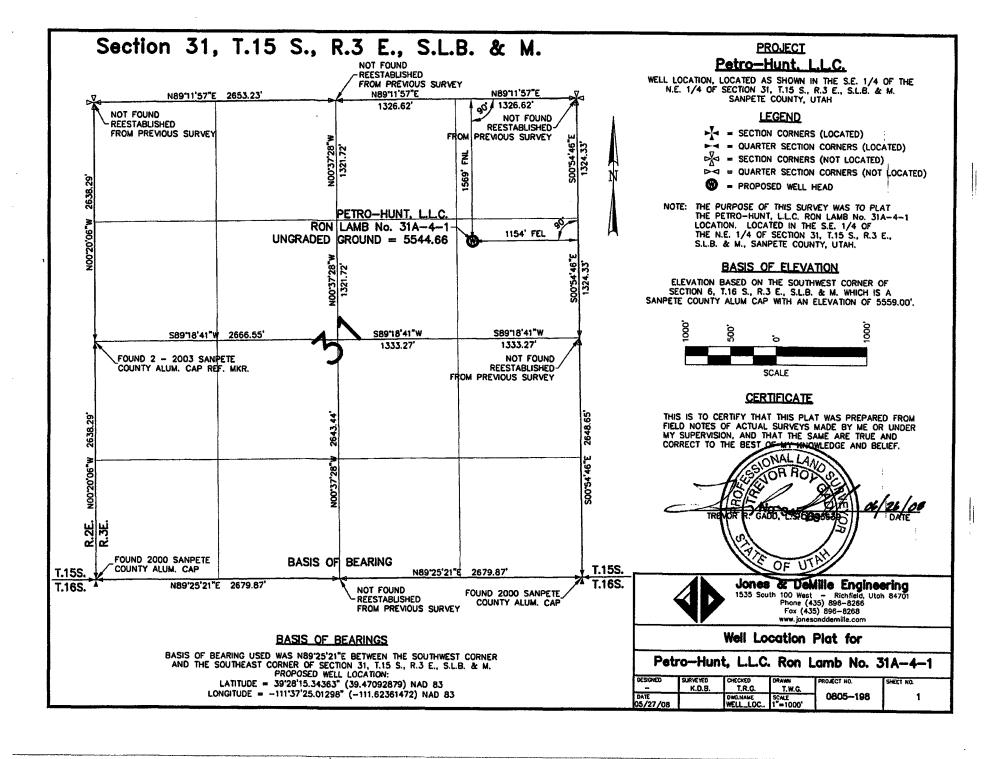
# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

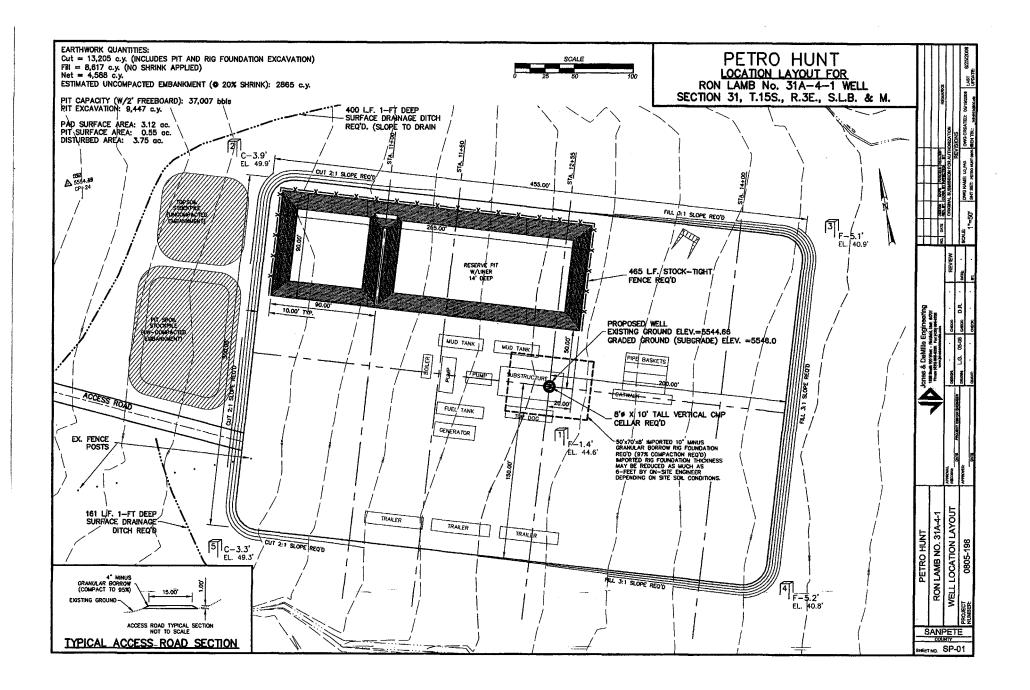
AMENDED REPORT **Z** (highlight changes)

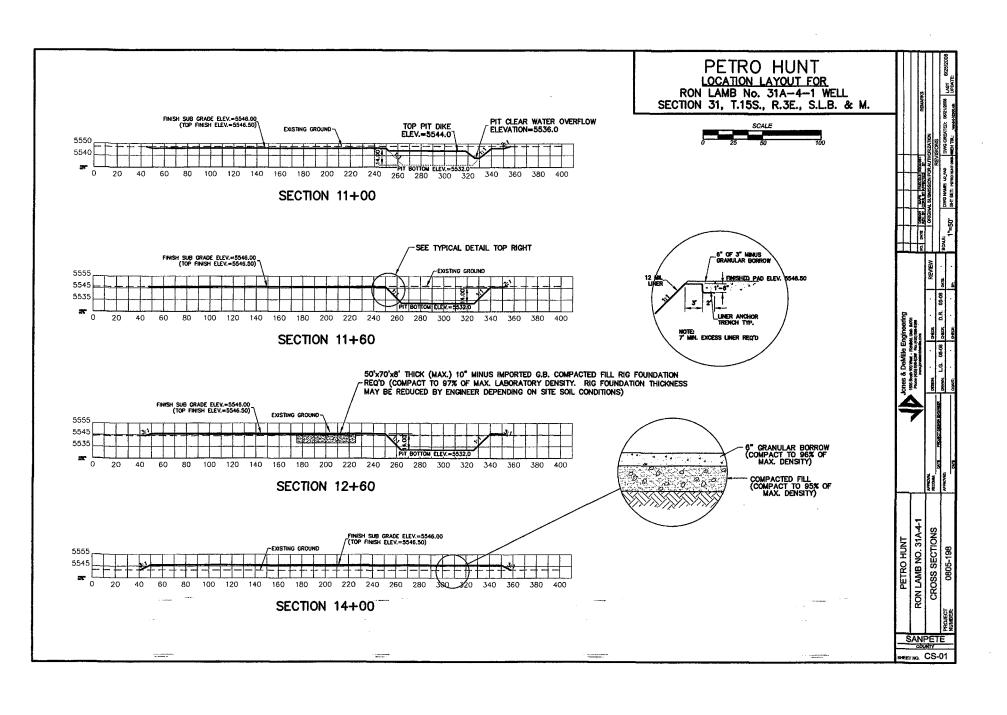
								(highligh	nt changes)
	APPLICATION FOR PERMIT TO DRILL							5. MINERAL LEASE NO: Patented	6. SURFACE: Fee
1A. TYPE OF WO	1A. TYPE OF WORK: DRILL A REENTER DEEPEN								TRIBE NAME:
B. TYPE OF WE	B. TYPE OF WELL: OIL  GAS OTHER SINGLE ZONE MULTIPLE ZONE  8. UNIT or CA AGREEMENT NAME:  N/A  8. UNIT or CA AGREEMENT NAME:  N/A								
2. NAME OF OPE	RATOR:					<u></u>		9. WELL NAME and NUMBER	<b>:</b>
PETRO-HU		-						RON LAMB TRU	
3. ADDRESS OF 258 - 119th		CITY Killdeer		TE ND ZIP 586	340	PHONE NUMBER: (701) 863-6622		10. FIELD AND POOL, OR W	LDCAT:
	4. LOCATION OF WELL (FOOTAGES)  11. QTR/QTR, SECTION, TOWNSHIP, RANGE,								
AT SURFACE:	1,569' FN	IL & 1,154' FEL	-					MERIDIAN: SENE 31 158	S 3E S
AT PROPOSED	PRODUCING Z	ONE:							
14. DISTANCE IN	MILES AND DIR	ECTION FROM NEARE	ST TOWN OR POS	ST OFFICE:				12. COUNTY:	13. STATE: UTAH
1.35 mile	s south of	Wales, Utah						Sanpete	OTAIT
	NEAREST PRO	PERTY OR LEASE LIN	E (FEET)	16. NUMBER OF	ACRES IN LEA	se: 21	17. N	UMBER OF ACRES ASSIGNED	TO THIS WELL:
		LL (DRILLING, COMPLE	TED, OR	19. PROPOSED	DEPTH:		20. B	OND DESCRIPTION:	
APPLIED FOR None	R) ON THIS LEAS	SE (FEET)				16,000	St	atewide Surety RLE	30008181
	(SHOW WHETH	IER DF, RT, GR, ETC.):		22. APPROXIMA	ATE DATE WOR	K WILL START:	23. E	STIMATED DURATION:	
5,545' GR	l			10/1/200	)8		90	days	
24.			PROPOS	ED CASING AI	ND CEMEN	ITING PROGRAM			
SIZE OF HOLE	CASING SIZE	, GRADE, AND WEIGH	T PER FOOT	SETTING DEPTH		CEMENT TYPE, QU	ANTITY,	YIELD, AND SLURRY WEIGHT	
26"	20"	H-40 BTC	94.0#	1,000	See attac	ched drill plan			
17-1/2"	13-3/8"	K-55 BTC	68.0#	4,500	See attac	ched drill plan			
12-1/4"	9-5/8"	L-80 LTC	47.0#	8,300	See attac	ched drill plan			
8-1/2"	5-1/2"	L-80 BTC	20.0#	16,000	See attac	ched drill plan			
					API =	4	30393	30034	
25.				ATTA	CHMENTS				
VERIFY THE FOL	LOWING ARE A	TTACHED IN ACCORDA	ANCE WITH THE U	ITAH OIL AND GAS O	ONSERVATION	GENERAL RULES:			
WELL PL				NONES	<b>           </b>	OMPLETE DRILLING PLAN		CONFID	ENTIAL
WELL PL	AT OR MAP PRE	EPARED BY LICENSED	SURVEYOR OR E	NGINEER				e.	
EVIDENC	EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER  FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER								
	D	Llamailta.				Agont for Dat	, LI.	nt I I C	
NAME (PLEASE	NAME (PLEASE PRINT) Don Hamilton TITLE Agent for Petro-Hunt, L.L.C								
SIGNATURE	<u> 1)</u>	on Ha	milton		DAT	6/26/2008			
(This space for Sta	te use only)								

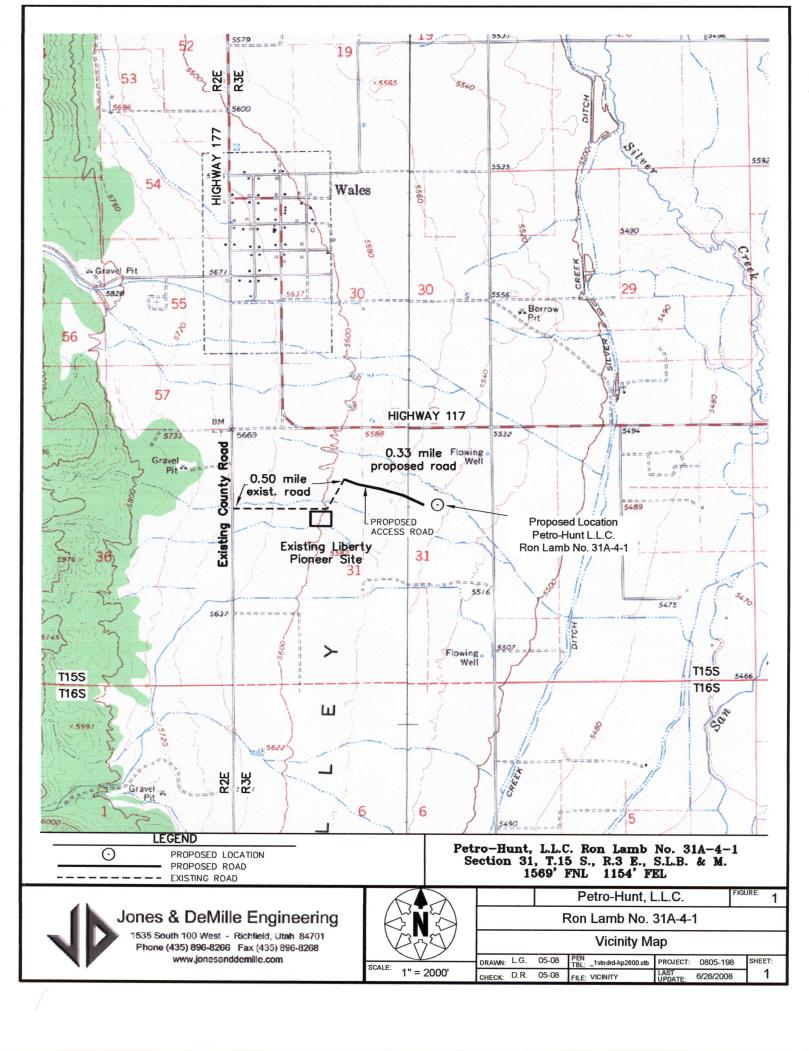
API NUMBER ASSIGNED: APPROVAL:

JUL 0 9 2008









#### **DRILLING PLAN**

#### **APPROVAL OF OPERATIONS**

6-25-08 Revised

#### Attachment for Form 9 - Sundry Notices and Reports on Wells

Name of Operator: Petro-Hunt, L. L. C.

Address:

258 119th Avenue S.W.

Killdeer, ND 58640

Well Location:

Ron Lamb 31A-4-1 Sanpete County, UT

I GEOLOGIC SURFACE FORMATION

Tertiary Undivided

#### 2. ESTIMATED DEPTHS OF IMPORTANT GEOLOGIC MARKERS

Formation	Depth MD
Jurassic Upper Twin Creek	8,550*
Jurassic Lower Twin Creek	9,100'
Jurassic Navajo	9,550'
Jurassic Lower Twin Creek	13,000
Jurassic Navajo	13,450'
Proposed Total Depth	16,0001

#### 3. ESTIMATED DEPTHS OF ANTICIPATED WATER. OIL, GAS OR MINERALS

<u>Formation</u>	<u>Depth</u>	Type
Jurassic Lower Twin Creek	9,100'	Oil
Jurassic Navajo	9,550'	Oil
Jurassic Lower Twin Creek	13,000'	Oil
Jurassic Navajo	13,450'	Oil

#### 4. PROPOSED CASING PROGRAM

All casing used to drill this well will be new casing.

<u>Type</u>	<u>Size</u>	Weight	<u>Grade</u>	Conn.	<u>Top</u>	<u>Bottom</u>	<u>Hole</u>
Conductor	20"	94 0 ppf	H-40	BTC	0,	1000'	26"
Surface	13-3/8"	68.0 ppg	K-55	BTC	0,	4,500'	17-1/2"
Intermediate	9-5/8"	47.0 ppf	L-80	LTC	0,	8,300	12-1/4"
Production	5-1/2"	20.0 ppf	L80	BTC	0,	16,000	8-1/2"

Note: The drilled depth of the surface hole and the setting depth of the surface casing may vary from 4,000' to 4,500'. Should a lost circulation zone be encountered while drilling, casing will be set approximately 300' below the lost circulation zone. If no lost circulation zone is encountered, casing to be set at 4,500'±.

#### 5. OPERATOR'S MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

Conductor hole: No BOPE will be utilized. Air, foam, mist, rotating head and diverter system may be utilized.

Surface hole: No BOPE will be utilized. Air, foam, mist, rotating head and diverter system may be utilized.

Intermediate hole: Prior to drilling out the surface casing shoe, intermediate and drilling liner, 5,000 psi or greater BOP equipment will be installed. The pipe rams will be operated at least once per day below surface casing to total depth if operations permit. The blind rams will be functioned once per day from below surface casing to total depth if operations permit.

#### RON LAMB 31A-4-1 SANPETE COUNTY, UTAH DRILLING PLAN

A diagram of the planned BOP equipment for normal drilling operations in this area is attached. There will be two valves and one check valve on the kill line, two valves on the choke line, and an adjustable choke on the manifold system. The BOP "stack" will consist of two BOP rams (1 pipe, 1 blind), rated to 5,000 psi working pressure and one annular type preventer, rated to a minimum of 5,000 psi working pressure.

The BOP equipment will be pressure tested prior to drilling out surface casing shoe and anytime a new casing string is set. All test pressures will be maintained for five (5) minutes without any significant pressure decrease. Clear water will be circulated into the BOP stack and lines prior to pressure testing. The following test pressures will be used as a minimum for various equipment items.

1.	Annular BOP	1,500 psi
2.	Ram type BOP	5,000 psi
3.	Kill line valves	5,000 psi
4.	Choke line valves and choke manifold valves	5,000 psi
5.	Chokes	5,000 psi
6.	Casing, casinghead & weld	1,500 psi
7.	Upper kelly cock and safety valve	5,000 psi
8	Dart valve	5,000 psi

#### 6. MUD SYSTEMS

- A freshwater / gel system will be used to drill the conductor and surface hole.
- A salt saturated mud system will be used to drill well thru the anticipated salt section.
- A lignosulfonate system will be used to drill the well below the salt section to total depth.
- The mud system will be monitored manually/visually.

<u>Depths</u>	Mud Weight (ppg)	Mud System
0'-1,000'	8.4 - 9.0	Freshwater / gel system
1,000' - 4,500'	8.6 - 9.0	Freshwater / gel system
4,500' - 8,300'	9.0 - 10.5	Saturated salt mud system
8,300 - 16,000'	9.0 - 10.4	Lignosulfonate mud system

#### 7. AUXILIARY EQUIPMENT TO BE USED

- a. Kelly cock.
- b. Full opening valve with drill pipe connection will be kept on floor. Valve will be used when the kelly is not in string.

#### 8. TESTING, LOGGING, AND CORING PROGRAMS TO BE FOLLOWED

- A drillstem test in the Navajo is possible.
- · Four electric wireline logs will be runs from total depth to surface are anticipated for this well
- The gamma ray will be left on to record from total depth to surface.
- Other log curves (resistivity, porosity, and caliper) will record from total depth to surface.
- A dipmeter and rotary sidewall cores may be run over selected intervals.

#### 9. ANTICIPATED ABNORMAL PRESSURES OR TEMPERATURES EXPECTED

- Expected BHP 8,070 psi (approximately equal to normal 9.7 ppg pressure gradient)
- No abnormal temperature or pressures are anticipated.
- The formations to be penetrated do not contain known H2S gas.

#### 10 WATER SUPPLY

- The water supply for construction, drilling and operations will be provided from two existing privately owned water wells in the area.
- No new water well is proposed with this application.
- Should additional water sources be pursued they will be properly permitted through the State of Utah Division of Water Rights

#### RON LAMB 31A-4-1 SANPETE COUNTY, UTAH <u>DRILLING PLAN</u>

#### 11. CEMENT SYSTEMS\*

#### a Conductor Cement:

- Drill 26" hole to 1,000'±, run and cement 20" to surface (depth to vary based on depth of lost circulation zone).
- Pump 20 bbls fresh water spacer. Displace with mud.
- Casing to be run with: a) double valve float shoe b) twelve (12) centralizers, two on the first joint and one per joint
  for the next ten joints c) pump job with top plug only.
- Cement the casing annulus to surface. Top out job to be performed if needed, a 1" tubing string may or may not
  be utilized.

					<u>Hole</u>	Cement
Type	<u>Sacks</u>	<u>Interval</u>	<b>Density</b>	<u>Yield</u>	<u>Volume</u>	<u>Volume</u>
Lead	710	0'-650'	12.7 ppg	1 769 CFS	624 CF	1247 CF
Tail	640	650'-1,000'	15.6 ppg	1 198 CFS	335CF	671 CF
Top Out	200	0'-80'	14.6 ppg	1.552 CFS	180 CF	310 CF

Conductor design volumes based on 100% excess of gauge hole (Typical design, subject to change).

Lead Mix: ECONOCEM + 2% Calcium Chloride + .125#/sx Poly-E-Flake

Slurry yield: 1 769 cf/sack Slurry weight: 12.7 #/gal.

Water requirement: 9.491 gal/sack

Tail Mix: Premium + 2% CaCl + .125 #/sx Poly-E-Flake

Slurry yield: 1.198 cf/sack Slurry weight: 15.6 #/gal

Water requirement: 5 251 gal/sack

Top Out: Premium + 12% Cal-Seal 60 + 3% Versaset

Slurry yield: 1.552 cf/sack Slurry weight: 14.60 #/gal.

Water requirement: 7.374 gal/sack

#### b. Surface Cement:

- Drill 17-1/2" hole to 4,500'±, run and cement 13-3/8" to surface (depth to vary based on depth of lost circulation zone).
- Pump 40 bbls Mud Flush III spacer. Displace with mud.
- Casing to be run with: a) float shoe b) float collar c) twelve (12) centralizers, two on the first joint and one per
  joint for the next ten joints d) bottom two joints thread locked f) pump job with top and bottom plugs.
- Cement the casing annulus to surface. Top out job to be performed if needed, a 1" tubing string may or may not be utilized.

					Hole	Cement
Type	Sacks	<u>Interval</u>	<b>Density</b>	<u>Yield</u>	<u>Volume</u>	<u>Volume</u>
Lead	1330	0'-4,000'	11.6 ppg	3.137 CFS	2083 CF	3125 CF
Tail	470	4,000'-4,500'	15 6 ppg	1.198 CFS	347CF	520 CF
Top Out	100	0'-100'	15.6 ppg	1-198 CFS	101 CF	310 CF

Surface design volumes based on 50% excess of gauge hole. (Typical design, subject to change).

Lead Mix: ECONOCEM

Slurry yield: 3.13798 cf/sack Slurry weight: 11.6 #/gal.

Water requirement: 17.903 gal/sack

Tail Mix: Premium + 2% CaCl + .125 #/sx Poly-E-Flake

Slurry yield: 1.198 cf/sack Slurry weight: 15.6 #/gal.

Water requirement: 5.251 gal/sack

Top Out: Premium + 12% Cal-Seal +3% Versaset

Slurry yield: 1.552 cf/sack Slurry weight: 14.6 #/gal.

Water requirement: 7.374 gal/sack

#### RON LAMB 31A-4-1 SANPETE COUNTY, UTAH DRILLING PLAN

- c. Intermediate Casing Cement:
  - Drill 12-1/4" hole to 8,300' ±, run and cement 9-5/8"
  - Pump 40 bbl Tuned Spacer III. Displace with 8.4 ppg salt saturated mud.
  - Casing to be run with: a) float shoe b) float collar c) twelve (12) centralizers, two on the first joint and one per
    joint for the next ten joints d) bottom two joints thread locked f) pump job with top and bottom plugs.

					nuic	Cement
Type	Sacks 5	<u>Interval</u>	Density	<u>Yield</u>	<u>Volume</u>	<u>Volume</u>
Lead	720	3500'-7,300'	11.0 ppg*	1.472 CFS*	1211 CF	1431 CF
Tail	290	7,300' 8,300'	14.3 ppg	1.472 CFS	313 CF	391 CF

\* = density & yield prior to foaming.

Intermediate design volumes are estimates based on 25% excess of gauge hole. Actual volumes will be calculated from caliper log to bring cement to 1,000' above 13 3/8" surface casing shoe + 15% excess. (Typical design, subject to change).

Lead Mix: ELASTISEAL + 20% SSA-1 + 5#/sx Silicalite + .1% Versaset + 1.5% FDP-C760-04 + .5% FDP-C766-05

Slurry yield: 1 472 cf/sack \* Slurry weight: 14.3 #/gal\*

Water requirement: 6 399 gal/sack Slurry weight: 11.0 #/gal (after foam)
\* = density & yield prior to foaming

Tail Mix; ELASTISEAL + 20% SSA-1 + 5#/sx Silicalite + .1% Versaset + .5% FDP-C766-05

Slurry yield: 1.472 cf/sack Slurry weight: 14.3 #/gal.

Water requirement: 6.399 gal/sack

d. Production Casing Cement:

Drill 8-1/2" hole to 16,000' ±, run and cement 5 1/2" production casing.

Pump 40 bbl 8.4 ppg Mud Flush III spacer.

Displace with 2% KCL completion fluid.

	•	·			<u>Hole</u>	Cement
Type	<u>Sacks</u>	<u>Interval</u>	Density	<u>Yield</u>	<u>Volume</u>	<u>Volume</u>
Lead	710	10,000' 14,500'	13.0 ppg	1.826 CFS	1030 CF	1288 CF
Lead	320	14,500'- 16,000'	14.35 ppg	1.419 CFS	343 CF	429 CF

Production design volumes are estimates based on 25% excess of gauge hole. Actual volumes will be calculated from caliper log + 15% excess. (Typical design, subject to change)

Lead Mix: 50/50 Poz + 3% CFR3 + 4% HR5 + 4% Halad R344 + 20% SSA-1

Slurry yield: 1.826 cf/sack Slurry weight: 13.0 #/gal.

Water requirement: 9 161 gal/sack

Tail Mix: 50/50 Poz + 3% CFR3 + 4% HR5 + 4% Halad R344 + 20% SSA-1 + 2% Super CBL

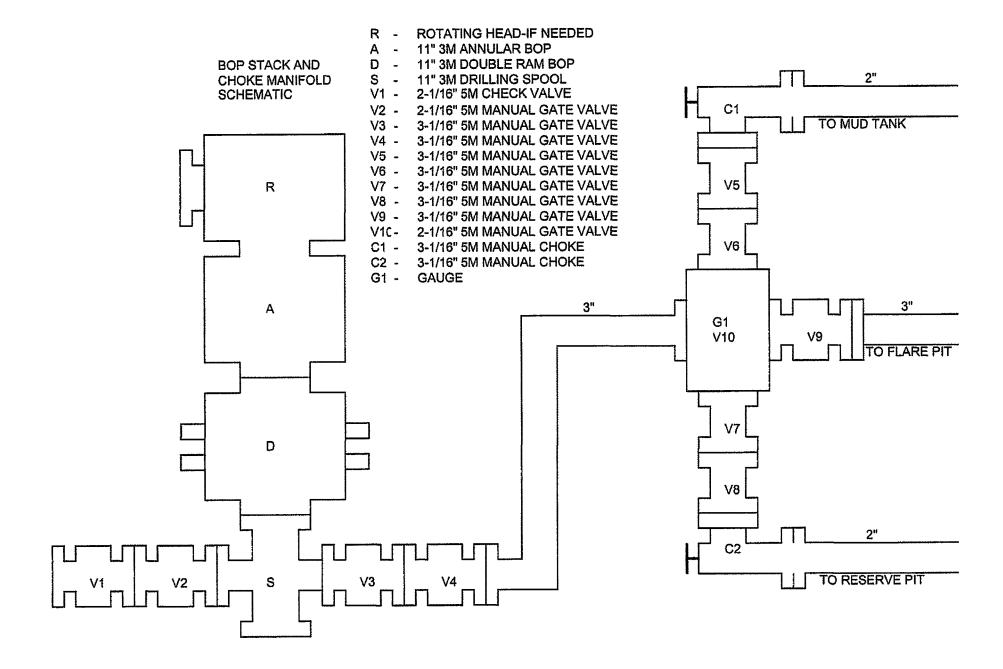
Slurry yield: 1 419 cf/sack Slurry weight: 14.35 #/gal.

Water requirement: 6 108 gal/sack

#### 12. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS

Starting Date: October 1, 2008
Duration: 100 Days

<sup>\*</sup> Actual cement designs may vary dependent upon selected vendor, casing depths, temperatures and well conditions.



# **CASING DESIGN CHART**

WELL: FIELD: RON LAMB 31A-4-1

WILDCAT - SANPETE COUNTY, UT

06/16/08

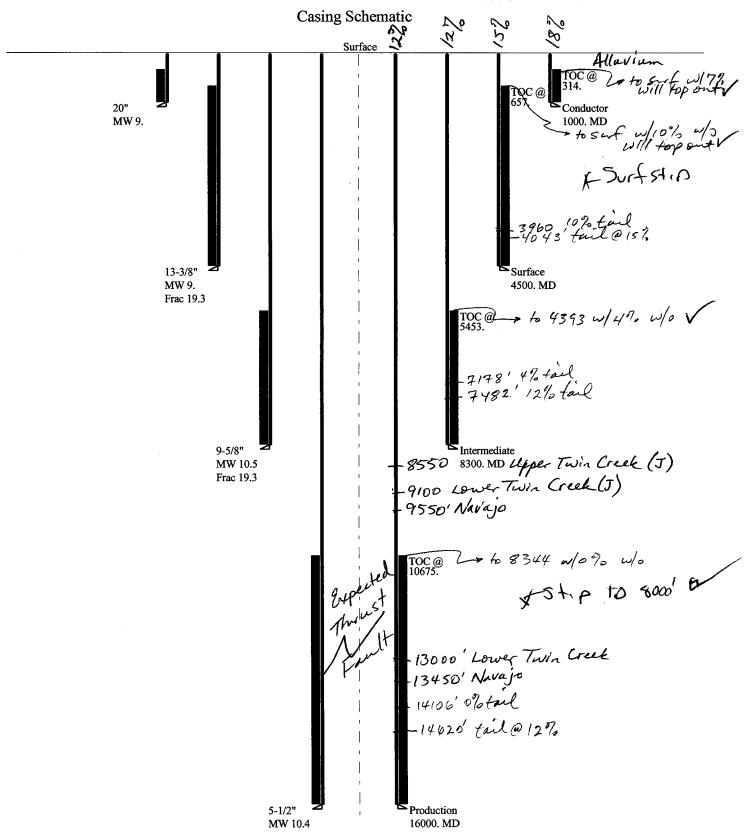
CÍV



				LENGTH	SETTING	SETTING	EST.	PRESS	EST.	EST.	EST.	CALC	WT IN	AIR	COLLA	PSE RATING	TENS. S	TRENGTH	
	1			OF	DEPTH	DEPTH	MUD	GRAD	948	FRAC.	GAS	HYDRO	SECTION	CUMM	100%	ADJUSTED	TOINT	BOOA	BURST
9 <b>7</b> E	WTIFT	GRADE	CONN	SECTION	TVD	MO	WT.	PEVFT	MW7ppg	GRAD, PPG	GRAD.	PRESS	1000 LBS	1000 LBS	PSI	TENSILE	1000 LBS	1000 LBS	RATING
30	.375" wall	8	P.E.	80	80	80													
20"	94.00	H40	втс	1000	1000	1000	9	0.468	0.432	12.1	0.10	468	94	94	520	520	1041	1077	1530
13 3/8"	68.00	K55	втс	4500	4500	4500	9	0.468	0.432	14.4	0.10	2106	306	306	1950	1950	1300	1069	3450
9 5/8"	47.00	L80	LTC	8300	8300	8300	10.5	0.546	0.510	16.0	0.10	4532	390	390	4760	4760	893	1086	6870
5 1/2"	20.00	L80	втс	14200	14200	14200	10.4	0.541	0.504	N/A	0.15	7679	284	284	8830	8830	503	466	8990
			EUE	44000	44000	14000	10.4	0.541	0.504	N/A	0.15	7571	91	91	11170	11170	145	145	10570
2 7/8" Tbg	6.50	L80	EUE	14000	14000	14000	10.4	0.341	0.304	HIM	0.15	13/1	7,	31	1.170			, 40	

		SAFETY F	ACTORS		1					
		DRILLING	············	PROD.		r-	· · · · · · · · · · · · · · · · · · ·		· ·	
	COL	TENS	BURST	BURST	ASP	ASP	DRIFT	Pe(	CSG	CPLG
SIZE	1.100	1,600	1.200	1.200	DRLG	PROD	BODY	I.D.	1. D.	O.D.
20"	1,413	11.074	2,89	N/A	529	N/A	18.936	19.124	19.124	21
13 3/8"	1.178	3,493	1.2	N/A	2920	N/A	12.259	12.415	12.415	14.37
9 5/8"	1.500	2.289	2.20	N/A	3130	5575	SP DFT 8.625	8.681	8.681	10.62
5 1/2"	1.591	1.641	N/A	1.613	N/A	5575	4.767	4.892	4.892	6.050
2 7/8" Tbg	2.042	1.593	N/A	1.896	N/A	5575	2.347	2.441	2,441	3.668
HP = MUD WT @	TD - 0.7 PP	G X .052 X T	/D =				7162			

# 43039300340000 Ron Lamb Trust 31A-4-1



43039300340000 Ron Lamb Trust 31A-4-1 Well name:

Petro-Hunt L.L.C. Operator:

Conductor String type:

Project ID:

43-039-30034 (rev 2006-11)

Sanpete County Location:

Design parameters: Minimum design factors: **Environment:** 

Collapse Mud weight: paq 000.e

Internal fluid density: 2.330 ppg Collapse: H2S considered?

No 75 °F Design factor 1.125 Surface temperature: 89 °F Bottom hole temperature:

1.40 °F/100ft Temperature gradient: Minimum section length: 250 ft

Burst:

Design factor 1.00 Cement top:

Non-directional string.

314 ft

**Burst** 

Max anticipated surface

pressure: Internal gradient: Calculated BHP

347 psi 0.120 psi/ft 467 psi

No backup mud specified.

Tension:

8 Round STC: 8 Round LTC: **Buttress:** 

Premium: Body yield: 1.60 (J) 1.50 (J) 1.50 (B)

1.80 (J)

1.80 (J)

Tension is based on buoyed weight.

Neutral point:

866 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	1000	20	94.00	H-40	Buttress	1000	1000	18.999	1994.5
Run Seq	Collapse Load (psi) 346	Collapse Strength (psi) 520	Collapse Design Factor 1.501	Burst Load (psi) 467	Burst Strength (psi) 1530	Burst Design Factor 3.27	Tension Load (Kips) 81	Tension Strength (Kips) 1041	Tension Design Factor 12.79 J

Helen Sadik-Macdonald Prepared by:

Div of Oil, Gas & Minerals

Phone: 801-538-5357 FAX: 801-359-3940

Date: August 6,2008 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 1000 ft, a mud weight of 9 ppg. An internal gradient of .121 psi/ft was used for collapse from TD to Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

43039300340000 Ron Lamb Trust 31A-4-1 Well name:

Petro-Hunt L.L.C. Operator:

Surface String type:

43-039-30034 (rev 2006-11)

Sanpete County Location:

Design parameters: Minimum design factors: **Environment:** 

Collapse Collapse: H2S considered?

75 °F Mud weight: 9.000 ppg Design factor 1.125 Surface temperature: 138 °F Internal fluid density: 2.330 ppg Bottom hole temperature:

Temperature gradient: 1.40 °F/100ft

Project ID:

Minimum section length: 250 ft

**Burst:** 

Design factor 1.00 Cement top: 656 ft **Burst** 

Max anticipated surface

pressure: 3,531 psi Internal gradient: Non-directional string. 0.120 psi/ft **Tension:** 

Calculated BHP 8 Round STC: 1.80 (J) 4,071 psi 8 Round LTC: 1.80 (J)

**Buttress:** 1.60 (J) Annular backup: 2.33 ppg 1.50 (J) Premium:

1.50 (B) Body yield: Re subsequent strings:

Next setting depth:

8,300 ft Tension is based on buoyed weight. Next mud weight: 10.500 ppg 3,898 ft Next setting BHP: 4,527 psi Neutral point: Fracture mud wt: 19.250 ppg 4,500 ft

Fracture depth: Injection pressure:

**True Vert** Measured Drift Run Segment Nominal End Internal Length Size Weight Grade **Finish** Depth Depth Diameter Capacity Seq (ft) (in) (lbs/ft) (ft) (ft) (in) (ft3) 4500 68.00 4500 4500 12.29 3782.8 1 13.375 K-55 **Buttress** 

**Burst Burst Burst** Tension **Tension Tension** Run Collapse Collapse Collapse Strength Strength Design Load Strength Design Load Design Load Seq (Kips) **Factor** (psi) **Factor** (psi) (psi) Factor (Kips) (psi) 1 1.251 3531 3450 0.98 265 1069 4.03 B 1559 1950

Fran pressure @ next setting dept 4

Cosms comented, frac gradient propubly
less than I poilft -> O.K. W/Petrothut
assumptions

No

4,500 psi

Helen Sadik-Macdonald Prepared Div of Oil, Gas & Minerals by:

Phone: 801-538-5357 FAX: 801-359-3940

Date: August 6,2008 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 4500 ft, a mud weight of 9 ppg. An internal gradient of .121 psi/ft was used for collapse from TD to Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

43039300340000 Ron Lamb Trust 31A-4-1 Well name:

Petro-Hunt L.L.C. Operator:

Intermediate String type:

Project ID:

43-039-30034 (rev 2006-11)

Sanpete County Location:

Design parameters: Minimum design factors: **Environment:** Collapse Collapse:

Mud weight: 10.500 ppg Internal fluid density: 2.330 ppg Design factor

1.125

1.80 (J)

1.80 (J)

H2S considered? Surface temperature: No 75 °F

191 °F Bottom hole temperature: Temperature gradient: 1.40 °F/100ft

Minimum section length: 1,500 ft

**Burst:** 

Design factor 1.00 Cement top:

5,453 ft

**Burst** 

Max anticipated surface

Annular backup:

pressure: 5,124 psi Internal gradient: 0.220 psi/ft Calculated BHP

6,950 psi

2.33 ppg

**Tension:** 

8 Round STC: 8 Round LTC: Buttress:

1.60 (J) 1.50 (J) Premium: 1.50 (B) Body yield:

Tension is based on buoyed weight. Neutral point: 6,993 ft

Non-directional string.

Re subsequent strings:

Next setting depth: Next mud weight: Next setting BHP:

16,000 ft 10.400 ppg 8,644 psi 19.250 ppg

Fracture mud wt: Fracture depth: Injection pressure:

8,300 ft 8,300 psi

Run	Segment		Nominal		End	True Vert	Measured	Drift	Internal
Seq	Length (ft)	Size (in)	Weight (lbs/ft)	Grade	Finish	Depth (ft)	Depth (ft)	Diameter (in)	Capacity (ft³)
1	8300	9.625	47.00	L-80	LT&C	8300	8300	8.625	3411.5
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load	Strength	Design	Load	Strength	Design	Load	Strength	Design
	(psi)	(psi)	Factor	(psi)	(psi)	Factor	(Kips)	(Kips)	Factor
1	3523	4760	1.351	5946	6870	1.16	329	893	2.72 J

Prepared

by:

Helen Sadik-Macdonald Div of Oil, Gas & Minerals Phone: 801-538-5357 FAX: 801-359-3940

Date: August 6,2008 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 8300 ft, a mud weight of 10.5 ppg An internal gradient of .121 psi/ft was used for collapse from TD Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Well name: 43039300340000 Ron Lamb Trust 31A-4-1

Operator: **Petro-Hunt L.L.C.** 

String type: Production Project ID:

Compate County

Location: Sanpete County

Design parameters: Minimum design factors: Environment:

CollapseCollapse:H2S considered?NoMud weight:10.400 ppgDesign factor1.125Surface temperature:75 °F

Internal fluid density: 2.330 ppg Bottom hole temperature: 299 °F
Temperature gradient: 1.40 °F/100ft

Minimum section length: 1,500 ft

13,481 ft

**Factor** 

1.04

43-039-30034 (rev 2006-11)

Burst:

Design factor 1.00 Cement top: 10,675 ft

Max anticipated surface

pressure: 5,124 psi Internal gradient: 0.220 psi/ft **Tension**: **Non-directional string**.

Neutral point:

(psi)

8644

Calculated BHP 8,644 psi 8 Round STC: 1.80 (J) 8 Round LTC: 1.80 (J)
No hookup mud specified Buffres: 1.60 (J)

No backup mud specified.

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.50 (B)

Tension is based on buoyed weight.

**Factor** 

1.316

Drift Segment Nominal End True Vert Measured Internal Run Weight **Finish** Depth Depth Diameter Capacity Length Size Grade Seq (lbs/ft) (ft) (ft) (in) (ft³) (ft) (in) 1992.2 16000 16000 16000 4.653 1 5.5 20.00 L-80 Buttress Tension Collapse Collapse **Burst Tension Tension** Run Collapse **Burst** Burst Strength Design Load Strength Design Load Strength Design Load Seq

(psi)

8990

Prepared Helen Sadik-Macdonald by: Div of Oil,Gas & Minerals

(psi)

8830

Phone: 801-538-5357 FAX: 801-359-3940 Date: August 6,2008 Salt Lake City, Utah

(Kips)

466

(Kips)

270

**Factor** 

1.73 B

Remarks:

1

Collapse is based on a vertical depth of 16000 ft, a mud weight of 10.4 ppg. An internal gradient of .121 psi/ft was used for collapse from TD Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

(psi)

6707

#### Helen Sadik-Macdonald - Ron Lamb 31A-4-1 - Casing / BOPE

From:

"Cary Vice"

To:

"Helen Sadik-Macdonald" 08/07/2008 10:04 AM

**Date:** 08/07/2008 10:04 AM **Subject:** Ron Lamb 31A-4-1 - Casing / BOPE

CC:

"Dustin Doucet"

#### Helen,

Petro-Hunt, L. L. C. uses the formulas listed below for casing design. I have used them extensively throughout the Gulf coast for land and offshore operations. Petro-Hunt, L. L. C.'s acceptable safety factors are 1.1 for collapse, 1.2 for burst and 1.6 for tension.

For Conductor and Surface casing, we use the following formula which assumes the hole would be voided of mud and filled with gas:

Collapse = casing collapse rating

(MW)(.052)(TVDscp) - (Gg)(TVDscp)

MW = mud weight; TVDscp = tvd at conductor / surface casing point; Gg = gas gradient.

For Intermediate and Drilling liners, we use the following formula which assumes a maximum of 50% evacuation of mud in the hole, replaced by a gas gradient:

Collapse = casing collapse rating

(MWicp)(.052)(TVDicp) - (Gg)(LG) - (MMW)(.052)(LM)

MWicp = mud wt at inter. csg pt; TVDicp = tvd at inter. csg pt; Gg = gas gradient; LG = length of gas (tvd); LM = length of max. mud (tvd); MMW = maximum mud weight this casing will see.

Length of gas and length of maximum mud is based on hole being 50% voided at next casing point.

For conductor and surface casing, we use the following formula which assumes the weakest point to be the fracture gradient and the shoe:

Top burst = casing burst rating

**ASP** 

ASP = (FGscp)(.052) - (Ggscp)(TVDscp)

ASP = anticipated surface pressure; FGscp = frac.gradient at surf.csg point;

For intermediate casing, we use the following formula which assumes a 50% evacuation of mud in the hole:

# Top burst = casing burst rating **ASP Drilling**

ASP DRILLING = FP - (MM)(.052)(LM) - (Gg)(LG)

FP = formation pressure at next csg seat; MM = maximum mud weight at this csg will see; LM = length of mud based on 50% void;

As far as the BOPE for the surface hole, we plan to use a rotating head and diverter system. This would include a diverter spool and 20" annular preventer installed on top of the 20" conductor casing. I may have mistated this in the sundry drilling plan. I am assuming that with the submission of this data, you will now be able to approve our sundry. If you have any other questions, please do not hesitate to call or email.

Thanks,

Cary J. Vice Petro-Hunt, L. L. C. **Drilling / Completion Engr.** 

suffice suffer point is Ift below previous, csg. shoe (frac. gradinto "leakest point is less than mud with from downhole)"
ient is less than mud with from downhole) "Look at Ben Eaton Frac gradient chert. Won't get to 12 165 at 4500 ft. Formation will fail first."

#### Helen Sadik-Macdonald - Ron Lamb 31A-4-1

From:

Helen Sadik-Macdonald

To:

"Cary Vice"

Date: Subject:

08/06/2008 2:52 PM Ron Lamb 31A-4-1

CC:

**Dustin Doucet** 

#### Cary,

I perform preliminary engineering evaluation on APDs for the Utah Division of Oil, Gas, & Mining.

For the above-cited well, all four proposed casing strings fail for collapse (SF 1.125). Surface and intermediate strings fail for burst (SF 1.0)

From past discussions with Dustin, you have been apprised DOGM uses the following safety factors:

burst 1.0 collapse 1.125 tension 1.80 (STC, LTC) 1.60 (BTC) in evacuated pipe, no annular backup.

Please provide me the assumptions you utilized for the design of the Ron Lamb 31A-4-1. Regardless of correspondence on previous wells, this information is necessary to complete the APD record on any well that does not meet our SFs.

Additionally, BOPE will be required for drilling the surface hole to 4500 feet.

Thank you and I look forward to your response. Respectfully,

Helen Sadik-Macdonald, CPG, PG Petroleum Engineering Services Utah Div. of Oil, Gas & Mining PO Box 145801 Salt Lake City, UT 84114-5801

801/538-5357 Desk 801/359-3940 Fax

BOPE REVIEW			Petro Hun	t Ron Lam	b 31A-4-1(re	v 2006-11) API 43-039-0
Well Name		Petro Hunt Ro	n Lamb 31A-4-1		API 43-039-0034-	
		String 1	String 2	String 3	String 4	
Casing Size (")		20	13 3/8	9 5/8	5 1/2	
Setting Depth (TVD)		1000	4500	8300	16000	
Previous Shoe Setting Depth (TVI	O)	0	1000	4500	8300	
Max Mud Weight (ppg)	•	9	9	10.5	10.4	. •
BOPE Proposed (psi)		0	500	5000	5000	
Casing Internal Yield (psi)		1530	3450	6870	8990	
Operators Max Anticipated Pressu	ıre (psi)	8070			9.7 pr	og ,
Calculations	String 1	20	11		····	
Max BHP [psi]	.052*Setting Depth*MW =	468	I	J		
max bill [boil]	.ooz coung bepar ww	1 100		te For Drilling	And Setting Casir	ng at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	348				-0
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =					
(adamad) [bail	max 2: ii (0.22 Cotting Deptil)			ected Pressure	Be Held At Previo	ous Shoe?
Pressure At Previous Shoe	HP22*(Setting Depth - Previous Shoe Depth) =	248		0.V2.		<u></u>
Required Casing/BOPE Test Pro		500		<u> </u>		
*Max Pressure Allowed @ Previ			psi 📈	- *Assumes 1psi	/ft frac gradient	
	one crains energy			, 1000 i pai		
Calculations	String 2		19			
Max BHP [psi]	.052*Setting Depth*MW =	2106				
		•			And Setting Casir	
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =			Rotating head	and diverter system	n will be utilized
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	1116		-		
					Be Held At Previo	
	HP22*(Setting Depth - Previous Shoe Depth) =			noexpe	cted pressured	- dulled Similarly in area
Required Casing/BOPE Test Pro	essure	2415		<b>-</b>		(
*Max Pressure Allowed @ Previ	ous Casing Shoe =	1000	psi	*Assumes 1psi	/ft frac gradient	
Calculations	String 3	9 5/8	п			
Max BHP [psi]	.052*Setting Depth*MW =	4532				
					And Setting Casir	ng at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	3536				
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	2706				
				ected Pressure	Be Held At Previo	ous Shoe?
	HP22*(Setting Depth - Previous Shoe Depth) =					
Required Casing/BOPE Test Pro		4809				
*Max Pressure Allowed @ Previ	ous Casing Shoe =	3450	psi	*Assumes 1psi	/ft frac gradient	
Calculations	String 4	5 1/2	"			
Max BHP [psi]	.052*Setting Depth*MW =			•		
Ibail	1002 Colling Dopar WW =	1 0000		te For Drilling	And Setting Casir	ng at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	6733				<u> </u>
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =			Superte 1 Dula	SO TO AS " - J MA	SP=4550ps; OKtortus Eco
(Odd/mdd/[psi]	t (0.22 Colling Deptil) =	0100	*Can Full Exp	ected Pressure	Be Held At Previ	ous Shoe?
Pressure At Previous Shoe	HP22*(Setting Depth - Previous Shoe Depth) =	6050	YES V			
	THE LOCKING DODGE - LEGIOUS OFFICE DEPUTY -	1 0000	, LO F			
Required Casing/BOPE Test Pro		5000	nsi			

#### SURFACE DAMAGE AGREEMENT

This Agreement is between, Alfred Ron Lamb and Nicole Lamb, as joint tenants, hereinafter referred to as "Lessor", whose address is HC13 Box 4205 Wales, Utah 84667 and Petro-Hunt, L.L.C., hereinafter referred to as "Operator", whose address is Suite 3400; 1601 Elm Street; Dallas, Texan 75201

#### The above parties agree to the basic understanding as follows:

Prior to the commencement of any drilling operation by Operator on any land in Sanpete County, Utah on which Lessor own surface rights ("Subject Land"), Operator shall make the following payments as full and complete compensation for damage to the surface:

\$500 per acre for each drill-site location and its associated access road

Operator's use of, and access to, the Subject Lands is at its own cost and risk. Operator agrees to bear all liabilities caused by its operation. A copy of Operator's State of Utah Blanket Bon in the amount of up to \$120,000 is attached hereto as Exhibit 'A'. Operator's proof of liability insurance will be furnished to Lessor.

- (1) Operator shall obtain Lessor's consent to the location of all access roads, which consent shall not be unreasonably withheld. Access roads shall not exceed 30 feet in width. All pipelines, power lines, and telephone lines that will be permanent will be buried below plow depth and mapped unless otherwise agreed. In the event of a dry hole, the drill site and roadways will be restored as required by law to as near as original condition as possible, or to Lessor's specification. Lessor Hereby gives its consent to the approximate location of the access road for the **Ron Lamb Well** as depicted on the plat attached hereto as Exhibit "B".
- (2) Unauthorized personnel, contractors, etc. will not have access to or be allowed on any drilling locations hereunder. Operator will make a reasonable effort to have company representative on the location at all times during drilling/completion operation. Firearms, liquor, and drugs shall be prohibited from all well location and access roads covered by this agreement.
- (3) Operator will reimburse Lessor for loss, damage, injury or death of Lessor's livestock caused by or directly related to Operator's exploration and production of oil or gas on any lands covered by this agreement. Operator will recompense Lessor at fir market value plus associated replacement costs, if any, relative to any livestock covered by this paragraph 3.
- (4) Operator will not bring permanent electric utilities onto the subject Property without first receiving written approval from Lessor, which shall not be unreasonably withheld.
- (5) Unless otherwise agreed, Operator will at all times keep all fencing and gates within the vicinity of the roads and drilling site utilized by the Operator under this agreement in a condition suitable to contain livestock.

#### PROPERTY RECLAMATION AGREEMENT

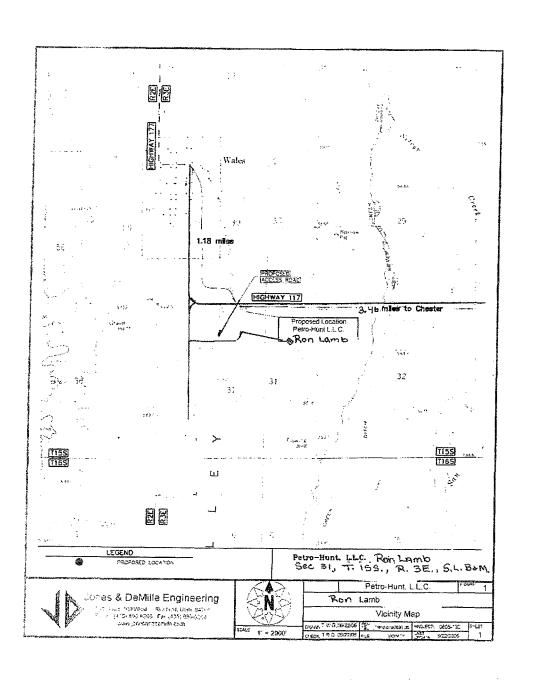
- 1. All topsoil will be stripped, stockpiled, and then replaced to support re-vegetation.
- 2. Ditches and culverts, gates, cattle guards will be returned as nearly as possible to original condition as required by law.
- 3. Reclamation work will be accomplished in a timely manner. Natural causes such as unusual weather conditions or ground settling or other force major events may delay reclamation.

All construction and maintenance costs relating to roads, drill pads, equipment and facilities hereunder shall be 4. born by Operator.

This agreement shall be binding upon Operator and Lessor, their respective heirs, executors, administrator, successor, and assigns and upon Operator, its executors, administrators, successors, and assigns. This agreement pertains to only to all surface areas owned by Lessor which may be disturbed in exploration and/or development by Operator, its

contractors, subcontractors and/or designees. Dated this 14th day of July, 2008. Lessor and Surface Owner: Alfred Ron Lamb and Nicole Lamb, as joint tenants HC13 Box 4205 Wales, Utah 84667 on Lamb Operator: Petro-Hunt, L.L.C. **Dennis Ludington** ACKNOWLEDGMENT STATE OF INDIVIDUAL COUNTY OF (For use in all states) July , 2008, before me, the undersigned Notary Public in and for said county day of and state, personally appeared, Alfred Ron Lamb and Nicole Lamb, known to me to be the person(s) whose name(s) ARE subscribed to the foregoing instrument, and THEY acknowledged that the same was executed and delivered as THIER free and voluntary act for the purposes therein set forth. In witness whereof I hereunto set my hand and official seal as of the date hereinabove stated. **SEAL** TAMMIE L LUDINGTON Notary Public My Commission Expires: 3 State of Utah

My Comm. Expires Mar 22, 2009 69 S. Main Street Manti UT 84642



......



300 E. Mineral Ave., Suite 10 Littleton, CO 80122-2631 303/781-8211 303/781-1167 Fax

July 18, 2008

Mrs. Diana Mason State of Utah Division of Oil Gas and Mining P.O. Box 145801 Salt Lake City, Utah 84114-5801

RE: Request for Exception to Spacing- Petro-Hunt, L.L.C.

Ron Lamb 31A-4-1 – 1,569' FNL & 1,154' FEL, SE/4 NE/4

Section 31, T15S, R3E, SLB&M, Sanpete County, Utah

Dear Mrs. Mason:

On behalf of Petro-Hunt, L.L.C.. (Petro-Hunt), Buys & Associates, Inc. respectfully submits this request for exception to spacing. A request for exception to spacing (R649-3-2) is hereby requested based on topography since the well is located within 460' of the drilling unit boundary. Petro-Hunt is the only owner and operator within 460' of the proposed well and all points along the intended wellbore path.

Please accept this letter as Petro-Hunt's, written request for confidential treatment of all information contained in and pertaining to this pending application.

Thank you very much for your timely consideration of this application. Please feel free to contact myself or Mick Homiston of Petro-Hunt at 701-863-6622 if you have any questions or need additional information.

Sincerely,

Don Hamilton
Agent for Petro-Hunt

cc: Mick Homiston, Petro-Hunt Cary Vice, Petro-Hunt

**RECEIVED** 

JUL 2 3 2008

DIV. OF OIL, GAS & MINING

# **DIVISION OF OIL, GAS AND MINING**

# **SPUDDING INFORMATION**

Name of Con	npany:	PET	RO-HU	JNT, LL	C		
Well Name:	· 	RON	LAM	B 31A-4-	1		·
Api No:	43-039-3003	4		Le	ase Type:	FE	E
Section 31	Township_	15S R	Range_	03E	_County	SA	NPETE
Drilling Con	tractor	PETE MA	<u>ARTIN</u>	DRLG	RIG	#	RATHOLE
SPUDDE	D:						
	Date	10/20/08					
	Time	<u> </u>					
	How	DRY	<del></del>				
Drilling wi	II Commence	e:	· · · · · · · · · · · · · · · · · · ·		an .	•	<u>-</u>
Reported by	w.c	JUNI	OR LA	MB			
Telephone #_		(601)	842-26	538		·	
Date	10/27//08	Signe	ed	CHD	·		

# CONFIDENTIAL

#### STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES

FORM 9

L	DIVISION OF OIL, GAS AND MI	INING	5. LEASE DESIGNATION AND SERIAL NUMBER: Patented
SUNDRY	NOTICES AND REPORT	S ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Offit Horizontal fac	w wells, significantly deepen existing wells below culerals. Use APPLICATION FOR PERMIT TO DRILL	rrent bottom-hole depth, reenter plugged wells, or to form for such proposals.	7. UNIT OF CA AGREEMENT NAME:
1 TYPE OF WELL OIL WELL			8. WELL NAME and NUMBER: Ron Lamb 31A-4-1
Petro-Hunt L.L.C.		43	9. API NUMBER: 039-30034
3 ADDRESS OF OPERATOR 258 119th Ave SW	Killdeer ND	58640 PHONE NUMBER: (701) 863-6622	10. FIELD AND POOL, OR WILDCAT: Wildcat
LOCATION OF WELL		(.07) 000 0022	
FOOTAGES AT SURFACE: 1569' F	NL 1154' FEL		соинту: San Pete
QTR/QTR, SECTION, TOWNSHIP, RANG	GE, MERIDIAN SENE 31 15S (	03E S	STATE: UTAH
	OPRIATE BOXES TO INDICAT	TE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION	ACIDIZE	TYPE OF ACTION	
Pete Martin Drilling Inc. dril Pro-Petro Services then ce	ALTER CASING  CASING REPAIR  CHANGE TO PREVIOUS PLANS  CHANGE TUBING  CHANGE WELL NAME  CHANGE WELL STATUS  COMMINGLE PRODUCING FORMATIONS  CONVERT WELL TYPE  MPLETED OPERATIONS. Clearly show all public descriptions. The state of the state	FRACTURE TREAT  NEW CONSTRUCTION  OPERATOR CHANGE  PLUG AND ABANDON  PLUG BACK  PRODUCTION (START/RESUME)  RECLAMATION OF WELL SITE  RECOMPLETE - DIFFERENT FORMATION  Destrinent details including dates, depths, volume of 30" conductor pipe for Petro-Huicks of G cement containing 2% conductor and 14" piperione 20" mousehole and ran 14" piperione 20"	nt at this well site on 10-20-2008. alcium chloride. Cement came to
NAME (PLEASE PRINT) Michael Ho	miston	TITLE District Engineer	
GIGNATURE MANNE	don	DATE 10/28/2008	
(This space for State use only)			

RECEIVED OCT 2 8 2008

#### STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

# **ENTITY ACTION FORM**

Operator:

Petro-Hunt L.L.C.

Operator Account Number: N 2815

Address:

258 119th Ave SW

city Killdeer

state ND

zip 58640

Phone Number: <u>(701)</u> 863-6622

#### Well 1

API Number	Well	Name	QQ	Sec	Twp	Rng	County
039-30034	Ron Lamb 31A-4-1		SENE	31	15S	03E	San Pete
Action Code	Current Entity Number	New Entity Number	s	pud Da	te		ty Assignment ffective Date
Α	99999	17/70	1	0/20/200	08	10	128/08
A	1 99999	17170	1	0/20/200		10	

Drill conductor hole prior to moving in rotary rig.

Well 2

API Number	Well	Name	QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	S	pud Da	te		ity Assignment ffective Date
Comments:							

#### Well 3

API Number	Well	Name	QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	9	pud Da	te		ity Assignment ffective Date
comments:						]	

#### **ACTION CODES:**

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity
- D Re-assign well from one existing entity to a new entity
- E Other (Explain in 'comments' section)

RECEIVED OCT 2 8 2008

Michael Homiston

Name (Please Print)

Signature

Title

District Engineer

10/28/2008

Date

 $\{5i2000\}$ 

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES

FORM 9

DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER:
SUNDRY NOTICES AND REPORTS ON WELLS	PATENTED  6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	N/A
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells drill honzontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.  1. TYPE OF WELL	7. UNIT or CA AGREEMENT NAME:  N/A
OIL WELL GAS WELL OTHER	8. WELL NAME and NUMBER:
2. NAME OF OPERATOR: PETRO-HUNT, L. L. C.	RON LAMB 31A-4-1
3. ADDRESS OF OPERATOR:	4303930034
258 119TH AVENUE SW CITY KILLDEER STATE ND ZIP 58640 PHONE NUMBER: (701) 863-662	10. FIELD AND POOL, OR WILDCAT:  2 WILDCAT
FOOTAGES AT SURFACE: 1569' FNL & 1154' FEL	
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENE 31 15S 3E S	COUNTY: SANPETE
	STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, RI	EPORT, OR OTHER DATA
TYPE OF ACTION	
NOTICE OF INTENT (Submit in Duplicate)  ACIDIZE  DEEPEN	REPERFORATE CURRENT FORMATION
FRACTURE TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start: CASING REPAIR NEW CONSTRUCTION	TEMPORARILY ABANDON
1/18/2009	TUBING REPAIR
CHANGE TUBING PLUG AND ABANDON	
SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK	VENT OR FLARE
CHANGE MELL OTTER	WATER DISPOSAL
COMMING E PRODUCTION (STANTAGESUME)	WATER SHUT-OFF
CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATIONS RECLAMATION OF WELL SITE  CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATIONS RECLAMATION OF WELL SITE  RECOMPLETE - DIFFERENT FORMATIONS RECLAMATION OF WELL SITE  RECOMPLETE - DIFFERENT FORMATIONS RECLAMATION OF WELL SITE  RECOMPLETE - DIFFERENT FORMATION OF WELL SITE  RECOMPLETE - DIFFERENT FORMATIO	OTHER:
We are currently drilling the Ron Lamb 31A-4-1 wildcat well at 9,761' RKB with a mud w test at 4,490' RKB of 11.5 ppg. We are allowing hole conditions to dictate the 9 5/8" intefor an "oolite" marker and the Navajo formation. With your approval, our current plans a which should occur prior to 11,500' RKB, and log this well. At that time, the decision will ntermediate casing, plugback for sidetrack operations or plug & abandon the well.	eight of 10.6 ppg and a 13 3/8" shoe ermediate casing point. We are lookin
test at 4,490' RKB of 11.5 ppg. We are allowing hole conditions to dictate the 9 5/8" interpretation of the time, the decision will intermediate casing, plugback for sidetrack operations or plug & abandon the well.  I have attached a revised casing design.  The revised two stage cement volumes for 9 5/8" intermediate at 11,500' with the diverted to the stage of the s	eight of 10.6 ppg and a 13 3/8" shoe ermediate casing point. We are looking re to drill into the Navajo formation, be made whether to run 9 5/8"  er tool at 4,500' are as follows: ume Cement Volume of 3155 cf cf 469 cf cf 432 cf
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We are currently drilling the Ron Lamb 31A-4-1 wildcat well at 9,761' RKB with a mud w test at 4,490' RKB of 11.5 ppg. We are allowing hole conditions to dictate the 9 5/8" interfor an "oolite" marker and the Navajo formation. With your approval, our current plans a which should occur prior to 11,500' RKB, and log this well. At that time, the decision will intermediate casing, plugback for sidetrack operations or plug & abandon the well.  If have attached a revised casing design.  The revised two stage cement volumes for 9 5/8" intermediate at 11,500' with the diverted by the stage of the stage o	eight of 10.6 ppg and a 13 3/8" shoe ermediate casing point. We are looking re to drill into the Navajo formation, be made whether to run 9 5/8"  The tool at 4,500' are as follows: tume Cement Volume of 3155 of considered of 432 of considered at 15 and diverter tool depth.  The provided HTML representation of the pro
We are currently drilling the Ron Lamb 31A-4-1 wildcat well at 9,761' RKB with a mud w test at 4,490' RKB of 11.5 ppg. We are allowing hole conditions to dictate the 9 5/8" interfor an "oolite" marker and the Navajo formation. With your approval, our current plans a which should occur prior to 11,500' RKB, and log this well. At that time, the decision will intermediate casing, plugback for sidetrack operations or plug & abandon the well.  If have attached a revised casing design.  The revised two stage cement volumes for 9 5/8" intermediate at 11,500' with the diverted Stage Type Sacks Interval Density Yield Hole Vol 1 Lead 1164 3,500' - 10,500' 11.5 ppg 2.71 cf/sx 2214 1 Tail 412 10,500' - 11,500' 14.3 ppg 5.42 cf/sx 313 2 Lead 160 3,000' - 4,300' 11.5 ppg 2.72 cf/sx 432 2 Tail 95 4,300' - 4,500' 15.8 ppg 1.25 cf/sx 93 Cement volumes may vary dependent upon actual casing setting depth, hole caliper results of the complex of the case of the complex of the case of	eight of 10.6 ppg and a 13 3/8" shoe ermediate casing point. We are looking re to drill into the Navajo formation, be made whether to run 9 5/8"  For tool at 4,500' are as follows:  The tool at 4,500' are as fo
We are currently drilling the Ron Lamb 31A-4-1 wildcat well at 9,761' RKB with a mud w test at 4,490' RKB of 11.5 ppg. We are allowing hole conditions to dictate the 9 5/8" interfor an "oolite" marker and the Navajo formation. With your approval, our current plans a which should occur prior to 11,500' RKB, and log this well. At that time, the decision will intermediate casing, plugback for sidetrack operations or plug & abandon the well.  If have attached a revised casing design.  The revised two stage cement volumes for 9 5/8" intermediate at 11,500' with the diverted stage. Type Sacks Interval Density Yield Hole Vol 1 Lead 1164 3,500' - 10,500' 11.5 ppg 2.71 cf/sx 2214 1 Tail 412 10,500' - 11,500' 14.3 ppg 5.42 cf/sx 313 2 Lead 160 3,000' - 4,300' 11.5 ppg 2.72 cf/sx 432 2 Tail 95 4,300' - 4,500' 15.8 ppg 1.25 cf/sx 93 Cement volumes may vary dependent upon actual casing setting depth, hole caliper results of the complex	eight of 10.6 ppg and a 13 3/8" shoe ermediate casing point. We are looking re to drill into the Navajo formation, be made whether to run 9 5/8"  For tool at 4,500' are as follows:  The tool at 4,500' are as fo
We are currently drilling the Ron Lamb 31A-4-1 wildcat well at 9,761' RKB with a mud w test at 4,490' RKB of 11.5 ppg. We are allowing hole conditions to dictate the 9 5/8" interest at 4,490' RKB of 11.5 ppg. We are allowing hole conditions to dictate the 9 5/8" interest of an "oolite" marker and the Navajo formation. With your approval, our current plans a which should occur prior to 11,500' RKB, and log this well. At that time, the decision will intermediate casing, plugback for sidetrack operations or plug & abandon the well.  I have attached a revised casing design.  The revised two stage cement volumes for 9 5/8" intermediate at 11,500' with the divertee Stage Type Sacks Interval Density Yield Hole Vol 1 Lead 1164 3,500' -10,500' 11.5 ppg 2.71 cf/sx 2214 1 Tail 412 10,500' -11,500' 14.3 ppg 5.42 cf/sx 313 2 Lead 160 3,000' - 4,300' 11.5 ppg 2.72 cf/sx 432 2 Tail 95 4,300' - 4,500' 15.8 ppg 1.25 cf/sx 93 Cement volumes may vary dependent upon actual casing setting depth, hole caliper rest CAME (PLEASE PRINTI) Cary J. Vice    APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS AND MINING OIL CARREST OIL	eight of 10.6 ppg and a 13 3/8" shoe ermediate casing point. We are looking re to drill into the Navajo formation, be made whether to run 9 5/8"  For tool at 4,500' are as follows:  The tool at 4,500' are as fo
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# **CASING DESIGN CHART**

WELL: FIELD:

RON LAMB 31A-4-1

WILDCAT - SANPETE COUNTY, UT

01/18/09

revised

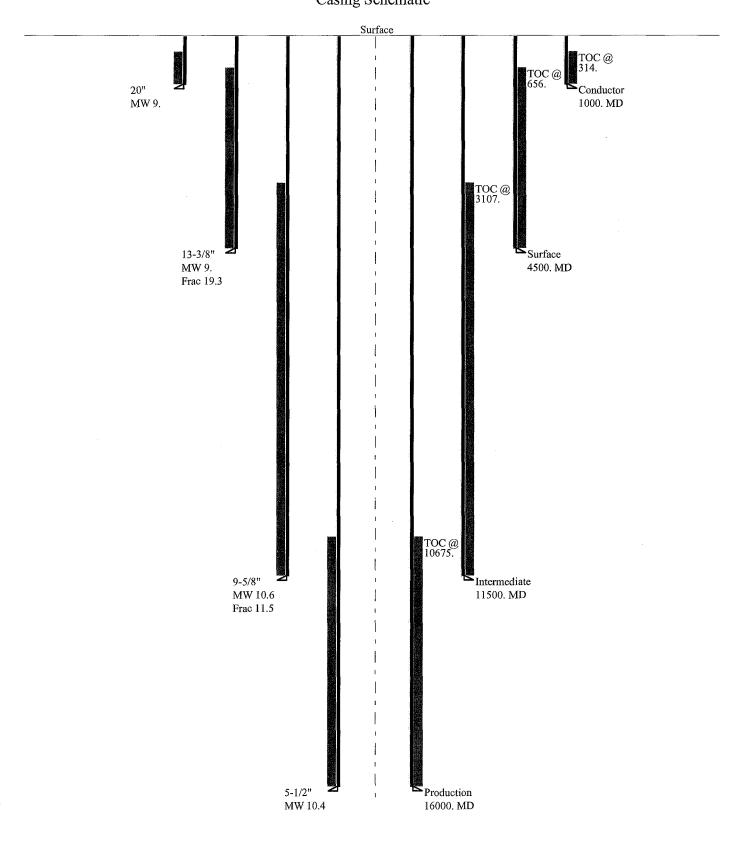
civ



			ľ	LENGTH	SETTING	SETTING DEPTH	EST.	PRESS	EST.	EST.	EST,	CALC	WTIN	AIR	COLLA	PSE RATING	77710		
SIZE	WT/FT	GRADE	CONN	SECTION	TVD	MD	WT.	GRAD PSI/FT	BHP	FRAC.	GAS	HYDRO	SECTION	CUMM	100%	ADJUSTED	JOINT	RENGTH BODY	BURS
30	.375" wall	В	P.E.	80	80	80	<u> </u>	FORFI	MW7ppg	GRAD. PPG	GRAD.	PRESS	1000 LBS	1000 LBS	PSI	TENSILE	1000 LBS	1000 LBS	RATIN
v		· · · · · · · · · · · · · · · · · · ·		- 00	- 50	80		<u> </u>						<del> </del>				······································	
20"	94.00	J/K55	ВТС	1026	1026	1026	9	0.468	0.432	12.1	0.10	480	96	96	500				 
····												100	30	96	520	520	1479	1480	2110
13 3/8"	68.00	HCL80	ВТС	4490	4490	4490	10.2	0.530	0.494	14.4	0.10	2204						· · · · · · · · · · · · · · · · · · ·	
	1	]					····		V.10-7	17.7	0.10	2381	305	305	2910	2910	1692	1556	5020
9 5/8"	47.00	L80	LTC	11500	11500	44500													
				11500	11500	11500	10.6	0.551	0.515	16.0	0.15	6339	541	541	4760	4760	893	1086	6870
5 1/2" on																			3070
top 5 1/2" on	20.00	L80	BTC	8100	8100	8100	10.4	0.541	0.504	N/A	0.10	4380	400						
btm	20.00	L80	LTC	6100	14200	14200	10.4	0.541	0,504	N/A	0.15		162	284	8830	8830	503	466	8990
· · · · · · · · · · · · · · · · · · ·									3.504	IVA	0.15	7679	122	122	8830	8830	416	466	9190
? 7/8" Tbg	6.50	L80	EUE	14000	14000	14000	10.4	0.541	0.504	N/A	0.15	7571	91	91	11170	11170	445		<del> </del>
-					1									<del></del>	11170	11170	145	145	10570

		<del></del>			Τ					
	-	SAFETY	FACTORS	<del></del>	_		• *		· · · · · · · · · · · · · · · · · · ·	
		DRILLING		PROD.						
	COL	TENS	BURST	BURST	ASP	ASP	DRIFT	PIN	csg	T
SIZE	1.100	1.600	1.200	1.200	DRLG	PROD	BODY	I. D.	I. D.	O. D.
20"	1,377	15.335	2.00							
	1.077	10.335	3.89	N/A	543	N/A	18.936	19.124	19.124	21
13 3/8"	1.506	5.096	1.7	N/A	2913	N/A	12.259	12.415	12.415	14.375
·							,_,_,	12.710	12.415	14.375
9 5/8"	1.645	1.652	2.48	N/A	2775	5575	SP DFT 8.625	8.681	8.681	10.625
5 1/2"	2.473	1.641	N/A	1.613	N/A	5575	4.767	4.892	4.892	6.050
5 1/2"	1.591	3.410	N/A	1.648	N/A	5575	4.767	4.892	4.892	6.050 6.050
									7.002	0.000
2 7/8" Tbg	2.042	1.593	N/A	1.896	N/A	5575	2.347	2,441	2.441	3.668
HP = MUD WT	@ TD - 0.7 F	PG X .052 X	TVD =				7162			

# 43039300340000 Ron Lamb Trust 31A-4-1rev.1-09 Casing Schematic



43039300340000 Ron Lamb Trust 31A-4-1rev.1-09 Well name:

Petro-Hunt L.L.C. Operator:

Intermediate String type:

Project ID:

Sanpete County Location:

43-039-30034 (rev 2006-11)

Design parameters: Collapse

Mud weight:

Minimum design factors: Collapse:

1.125

1.80 (J)

**Environment:** 

H2S considered? Surface temperature: No 75 °F

5.300 ppg 7 502 Internal fluid density:

Bottom hole temperature: 236 °F Temperature gradient:

1.40 °F/100ft

Minimum section length: 1,500 ft

Burst:

Design factor

Design factor

1.00 Cement top: 3,107 ft

**Burst** 

Max anticipated surface

pressure:

4,340 psi

10.600 ppg

Internal gradient: Calculated BHP

Annular backup:

0.220 psi/ft 6,870 psi

2.33 ppg

Tension:

8 Round STC: 8 Round LTC:

1.80 (J) 1.60 (J) Buttress: Premium: 1.50 (J)

Body yield: 1.50 (B)

Tension is based on buoyed weight. Neutral point: 9,671 ft

Non-directional string.

Re subsequent strings:

Next setting depth: Next mud weight: Next setting BHP:

16,000 ft 10.600 ppg 8,810 psi 11.500 ppg

Fracture mud wt: Fracture depth: Injection pressure:

11,500 ft 6,870 psi

Run Seq	Segment Length (ft) 11500	Size (in) 9.625	Nominal Weight (lbs/ft) 47.00	Grade L-80	End Finish LT&C	True Vert Depth (ft) 11500	Measured Depth (ft) 11500	Drift Diameter (in) 8.625	Internal Capacity (ft³) 4726.8
Run Seq	Collapse Load (psi) 3166	Collapse Strength (psi) 4760	Collapse Design Factor 1.503	Burst Load (psi) 5478	Burst Strength (psi) 6870	Burst Design Factor 1.25	Tension Load (Kips) 455	Tension Strength (Kips) 893	Tension Design Factor 1.96 J

Prepared

Helen Sadik-Macdonald Div of Oil, Gas & Mining

Phone: 801-538-5357 FAX: 801-359-3940

Date: January 20,2009 Salt Lake City, Utah

Collapse is based on a vertical depth of 11500 ft, a mud weight of 10.6 ppg. An internal gradient of .275 psi/ft was used for collapse from TD Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

#### FORM 9

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES	
DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER: PATENTED
SUNDRY NOTICES AND REPORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to	7. UNIT OF CA AGREEMENT NAME:
drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.  1. TYPE OF WELL  OIL WELL   GAS WELL  OTHER	8. WELL NAME and NUMBER:
2. NAME OF OPERATOR:	RON LAMB 31A-4-1
PETRO-HUNT, L. L. C.	4303930034
3. ADDRESS OF OPERATOR: 258 119TH AVENUE SW CATTY KILLDEER SLATE ND 28 58640 (701) 863-6622	10, FIELD AND POOL, OR WILDCAT: WILDCAT
4. LOCATION OF WELL	CANDETE
FOOTAGES AT SURFACE: 1569' FNL & 1154' FEL	COUNTY: SANPETE
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENE 31 15S 3E S	STATE: <b>UTAH</b>
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION TYPE OF ACTION	
✓ NOTICE OF INTENT □ ACIDIZE □ DEEPEN	REPERFORATE CURRENT FORMATION
(Submit in Duplicate)  ALTER CASING  FRACTURE TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start: CASING REPAIR NEW CONSTRUCTION	TEMPORARILY ABANDON
2/5/2009 CHANGE TO PREVIOUS PLANS OPERATOR CHANGE	TUBING REPAIR
CHANGE TUBING PLUG AND ABANDON	VENT OR FLARE
SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK	WATER DISPOSAL
(Submit Original Form Only)  CHANGE WELL STATUS  PRODUCTION (START/RESUME)	WATER SHUT-OFF
Date of work completion:  COMMINGLE PRODUCING FORMATIONS  RECLAMATION OF WELL SITE	OTHER:
CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volume	on oto
We are currently drilling the Ron Lamb 31A-4-1 wildcat well at 11,554' RKB with a mud weign test at 4,490' RKB of 11.5 ppg. We are allowing the hole conditions to dictate the 9 5/8" into looking for an "oolite" marker and the Navajo formation. With your approval, our current pla formation, which should occur prior to 15,000' RKB, and log this well. At that time, the decise 9 5/8" intermediate casing, plugback for sidetrack operations or plug & abandon the well.	ermediate casing point. We are ins are to drill into the Navajo
I have attached a revised casing design.	
The revised two stage cement volumes for 9 5/8" intermediate at 15,000' with the diverter to Stage Type Sacks Interval Density Yield Hole Volume  1 Lead 520 11,000' - 14,000' 11.5 ppg 2.71 cf/sx 939 cf  1 Tail 412 14,000' - 15,000' 14.3 ppg 1.23 cf/sx 313 cf  2 Lead 740 3,000' - 9,000' 11.5 ppg 2.72 cf/sx 2012 cf  2 Tail 95 9,000' - 9,200' 15.8 ppg 1.25 cf/sx 87 cf	ool at 9,200' are as follows: Cement Volume 1409 cf 506 cf 2013 cf 118 cf
NAME (PLEASE PRINT) Cary J. Vice  SIGNATURE DATE 2/5/2009	eer
This space for State use only)	
APPROVED BY THE STATE Date: 2.9.2009	==OEN/ED
	RECEIVED
OIL, GAS, AND MINING	FEB 0 5 2009
$ \sim$ 16 10 $\sim$	LED 0 3
DATE: A CONTRACTOR OF THE PARTY	DIV. OF OIL, GAS & MINING
BY: \\X\\\\X\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	DIV. OF OIL, S

# **CASING DESIGN CHART**

FIELD:

RON LAMB 31A-4-1 WILDCAT - SANPETE COUNTY, UT

02/05/09

revised



				LENGTH	SETTING	SETTING	EST.	PRESS	EST.	EST.	EST.	CALC	WT IN	AIR	COLLA	SE RATING		RENGTH	
SIZE	WT/FT	GRADE	CONN	OF SECTION	DEPTH	DEPTH	MUD WT.	GRAD PSI/FT	BHP MW7ppg	FRAC. GRAD. PPG	GAS GRAD.	HYDRO PRESS	SECTION 1000 LBS	CUMM 1000 LBS	100% PSI	ADJUSTED TENSILE	JOINT 1000 LBS	BODY 1000 LBS	BURST RATING
	.375" wall		P.E.	80	80	80													<u> </u>
																	<u> </u>		
20"	94.00	J/K55	втс	1026	1026	1026	9	0.468	0.432	12.1	0.10	480	96	96	520	520	1479	1480	2110
3 3/8"	68.00	HCL80	втс	4490	4490	4490	10.2	0.530	0.494	14.4	0.10	2381	305	305	2910	2910	1692	1556	5020
																, , , , , , , , , , , , , , , , , , , ,	-	,	
9 5/8"	47.00	HCP110	LTC	5500	5500	5500	10.6	0.551	0.515	16.0	0.10	3032	259	705	7100	7100	1213	1493	9440
9 5/8"	47.00	L80	LTC	9500	15000	15000	10.6	0.551	0.515	16.0	0.15	8268	447	447	4760	4760	893	1086	6870
1/2" on top	20.00	L80	втс	8000	8000	8000	10.4	0.541	0.504	N/A	0.10	4326	160	320	8830	8830	503	466	8990
1/2" on btm	20.00	L80	LTC	8000	16000	16000	10.4	0.541	0.504	N/A	0.15	8653	160	160	8830	8830	416	466	9190
				<u> </u>															
7/8" Tbg	6.50	L80	EUE	15800	15800	15800	10.4	0.541	0.504	N/A	0.15	8545	103	103	11170	11170	145	145	10570
7/8" Tbg	6.50	L80	EUE	15800	15800	15800	10.4	0.541	0.504	N/A	0.15	8545	103	103	11170	11170	145		145

		SAFETY F	ACTORS							
		DRILLING		PROD.					-	,
	COL	TENS	BURST	BURST	ASP	ASP	DRIFT	PIN	csg	CPLG
SIZE	1.100	1.600	1.200	1.200	DRLG	PROD	BODY	I.D.	1. D.	O. D.
20"	1.377	15.335	3.89	N/A	543	N/A	18.936	19.124	19.124	21
13 3/8"	1.506	5.096	1.7	N/A	2913	N/A	12.259	12.415	12.415	14.375
9 5/8"	2.750	1.721	5,35	N/A	1763	6207	SP DFT 8,625	8.681	8.681	10.625
9 5/8"	1.450	2,000	2.20	N/A	3126	6032	SP DFT 8.625	8.681	8.681	10.625
5 1/2"	2.504	1.456	N/A	1.490	N/A	6032	4.767	4.892	4.892	6.050
5 1/2"	1.412	2.600	N/A	1.524	N/A	6032	4.767	4,892	4.892	6.050
2 7/8" Tbg	1.809	1.412	N/A	1.752	N/A	6032	2.347	2.441	2.441	3.668
BHP = MUD WT	@ TD - 0.7	PPG X .05	2XTVD =				8070			

Well name:

43039300340000 Ron Lamb Trust 31A-4-1rev.2-09

Operator:

Petro-Hunt L.L.C.

String type:

Intermediate

Project ID:

43-039-30034 (rev 2006-11)

Location:

Sanpete County

Design	parameters:
--------	-------------

Collapse Mud weight:

Internal fluid density:

10.600 ppg 5.300 ppg Minimum design factors:

Collapse: Design factor

1.125

**Environment:** 

H2S considered? Surface temperature:

No 75 °F 285 °F

Bottom hole temperature: Temperature gradient:

1.40 °F/100ft

Minimum section length: 1,500 ft

Burst:

Design factor

1.00

1.80 (J)

Cement top:

4,463 ft

**Burst** 

Max anticipated surface

pressure: Internal gradient: Calculated BHP

Annular backup:

5,290 psi 0.220 psi/ft 8,590 psi

2.33 ppg

Tension:

8 Round STC:

8 Round LTC: 1.80 (J) 1.60 (J) Buttress: 1.50 (J) Premium:

1.50 (B) Body yield:

Tension is based on buoyed weight. Neutral point: 12,615 ft

Non-directional string.

Re subsequent strings:

Next setting depth: Next mud weight: Next setting BHP:

16,000 ft 10.600 ppg 8,810 psi

Fracture mud wt: Fracture depth: Injection pressure: 11.500 ppg 15,000 ft 8,961 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
2	5500	9.625	47.00	HCP-110	LT&C	5500	5500	8.625	2260.6
1	9500	9.625	47.00	L-80	LT&C	15000	15000	8.625	3904.7
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
2	1514	6520	4.306	5835	9440	1.62	593	1213	2.05 J
1	4130	4760	1.153	6775	6870	1.01	334	893	2.67 J

Prepared

Helen Sadik-Macdonald

by: Div of Oil, Gas & Mining

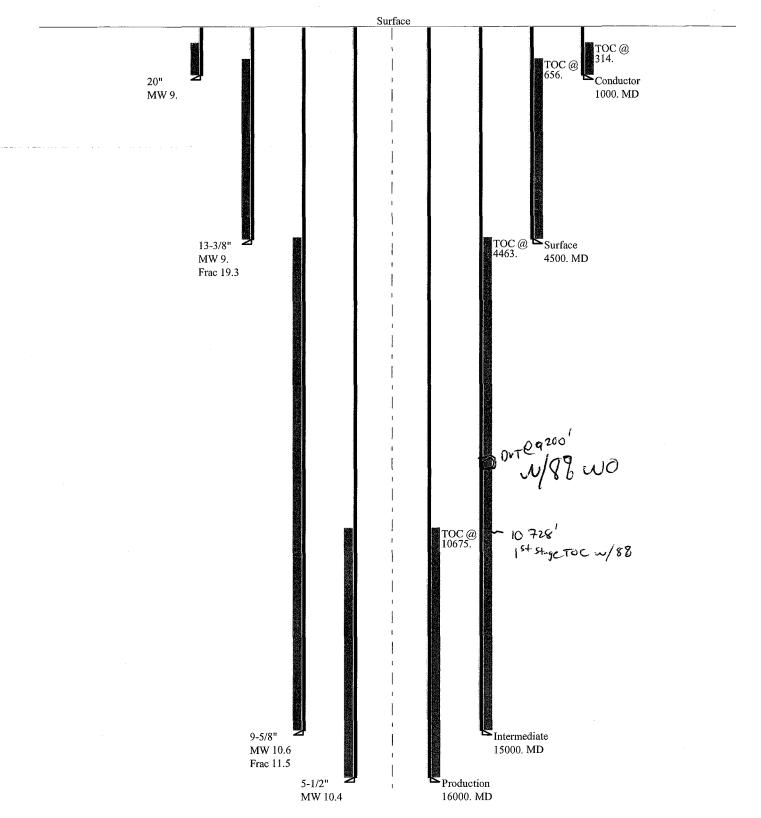
Phone: 801-538-5357 FAX: 801-359-3940

Date: February 5,2009 Salt Lake City, Utah

Collapse is based on a vertical depth of 15000 ft, a mud weight of 10.6 ppg. An internal gradient of .275 psi/ft was used for collapse from TD Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

# 43039300340000 Ron Lamb Trust 31A-4-1rev.2-09

Casing Schematic



#### STATE OF UTAH

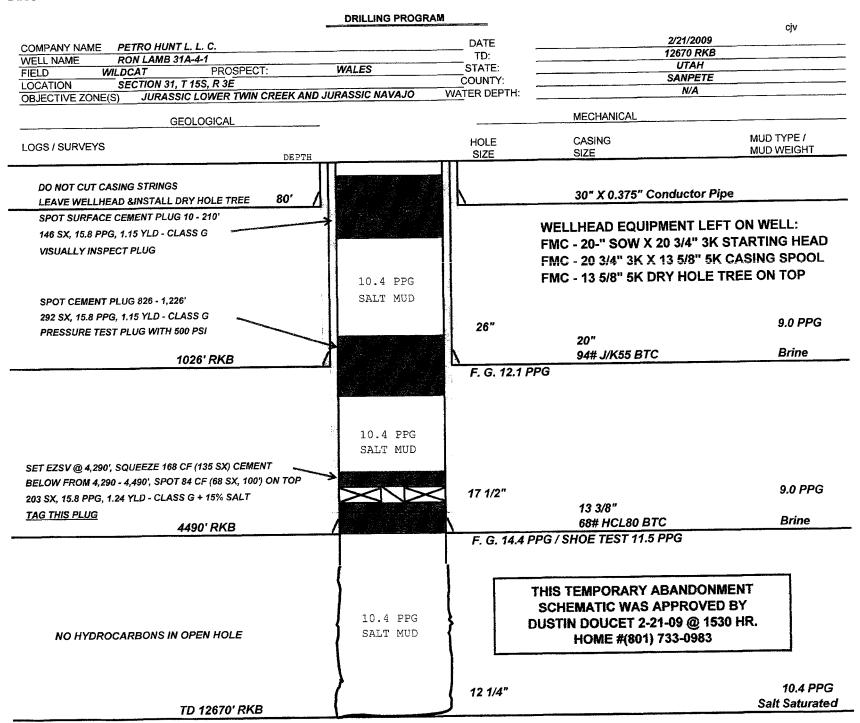
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL GAS AND MINING

# CONFIDENTIAL

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS	PATENTED
	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	7. UNIT OF CA AGREEMENT NAME: N/A
1. TYPE OF WELL OIL WELL GAS WELL OTHER DRY HOLE	8. WELL NAME and NUMBER: RON LAMB 31A-4-1
2. NAME OF OPERATOR:	9. API NUMBER: 4303930034
PETRO-HUNT, L. L. C.  3. ADDRESS OF OPERATOR: PHONE NUMBER:	10. FIELD AND POOL, OR WILDCAT:
258 119TH AVENUE SW CITY KILLDEER STATE ND ZIP 58640 (701) 863-6622	WILDCAT
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1569' FNL & 1154' FEL	COUNTY: SANPETE
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENE 31 15S 3E S	STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION TYPE OF ACTION	
NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will start:  2/21/2009  ACIDIZE  ACIDIZE  ACIDIZE  DEEPEN  FRACTURE TREAT  NEW CONSTRUCTION  OPERATOR CHANGE	REPERFORATE CURRENT FORMATION SIDETRACK TO REPAIR WELL TEMPORARILY ABANDON TUBING REPAIR
SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:  CHANGE WELL NAME PLUG BACK PRODUCTION (START/RESUME) COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION  12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volume	VENT OR FLARE WATER DISPOSAL WATER SHUT-OFF OTHER:
with plugging and temporary abandonment of the Ron Lamb 31A-4-1 well in Sanpete Co.,	), Petro-Hunt, L. L. C. will proceed  JT. There were no hydrocarbons in
with plugging and temporary abandonment of the Ron Lamb 31A-4-1 well in Sanpete Co., the open hole. A cement retainer will be set at +/- 4,290', 300' of cement will be squeezed to spotted on top of the retainer. This cement plug will be tagged. A cement plug will be set fit tested with 500 psi. A surface cement plug will be set from 10' - 210' and this plug will be viewill be installed on top of the wellhead equipment. (see attached Proposed T&A Schematic	pelow and 100' of cement will be rom 826' - 1,226' and pressure sually inspected. A dry hole tree
the open hole. A cement retainer will be set at +/- 4,290', 300' of cement will be squeezed a spotted on top of the retainer. This cement plug will be tagged. A cement plug will be set fit tested with 500 psi. A surface cement plug will be set from 10' - 210' and this plug will be will be installed on top of the wellhead equipment. (see attached Proposed T&A Schematic COPY SENT TO OPERATOR	pelow and 100' of cement will be rom 826' - 1,226' and pressure sually inspected. A dry hole tree
the open hole. A cement retainer will be set at +/- 4,290', 300' of cement will be squeezed a spotted on top of the retainer. This cement plug will be tagged. A cement plug will be set fit tested with 500 psi. A surface cement plug will be set from 10' - 210' and this plug will be will be installed on top of the wellhead equipment. (see attached Proposed T&A Schematic Plug will be installed on top of the wellhead equipment.)  COPY SENT TO OPERATOR  Date: 3'5 · 2009  Initials: V5	pelow and 100' of cement will be from 826' - 1,226' and pressure isually inspected. A dry hole tree by.  ECEIVED EB 2 3 2009 FOIL, GAS & MINING
the open hole. A cement retainer will be set at +/- 4,290', 300' of cement will be squeezed a spotted on top of the retainer. This cement plug will be tagged. A cement plug will be set fit tested with 500 psi. A surface cement plug will be set from 10' - 210' and this plug will be will be installed on top of the wellhead equipment. (see attached Proposed T&A Schematic Proposed T&A Schema	pelow and 100' of cement will be from 826' - 1,226' and pressure isually inspected. A dry hole tree by.  ECEIVED EB 2 3 2009 FOIL, GAS & MINING
the open hole. A cement retainer will be set at +/- 4,290', 300' of cement will be squeezed a spotted on top of the retainer. This cement plug will be tagged. A cement plug will be set fit tested with 500 psi. A surface cement plug will be set from 10' - 210' and this plug will be will be installed on top of the wellhead equipment. (see attached Proposed T&A Schematic Plug will be installed on top of the wellhead equipment.)  COPY SENT TO OPERATOR  Date: 3'5 · 2009  Initials: V5	pelow and 100' of cement will be from 826' - 1,226' and pressure isually inspected. A dry hole tree by.  ECEIVED EB 2 3 2009 FOIL, GAS & MINING

# PETRO HUNT L. L. C.



#### STATE OF UTAH



		ATURAL RESOURCES		A III
	DIVISION OF OIL	, GAS AND MINING		5 LEASE DESIGNATION AND SERVAL NUMBER PATENTED
SUNDR	Y NOTICES AN	D REPORTS ON W	ELLS	6 IF INDIAN, ALLOTTEE OR TRIBE NAME NA
Do not use this form for proposals to drill diffusionatel		existing wells below current bottom-hol OR PERMIT TO DRILL form for such pr		7 UNIT OF CA AGREEMENT NAME NA
1 TYPE OF WELL OIL WELL			<del></del>	8 WELL NAME and NUMBER RON LAMB 31A-4-1
2 NAME OF OPERATOR PETRO-HUNT LLC				9. API NUMBER 4303930034
3 ADDRESS OF OPERATOR. 258 119TH AVE SW	<sub>TY</sub> KILDEER	<sub>STATE</sub> ND <sub>ZIP</sub> 58640	PHONE NUMBER. (701) 863-6622	10 FIELD AND POOL, OR WILDCAT. WILDCAT
4. LOCATION OF WELL				
FOOTAGES AT SURFACE: 1569	FNL 1154 FEL			COUNTY SANPETE
QTR/QTR, SECTION, TOWNSHIP, RA	NGE MERIDIAN SENE	31 15S 3E S		STATE <b>UTAH</b>
11 CHECK APP	ROPRIATE BOXE	S TO INDICATE NATU	RE OF NOTICE, REPO	ORT, OR OTHER DATA
TYPE OF SUBMISSION			TYPE OF ACTION	
NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will start:	ACIDIZE  ALTER CASING  CASING REPAIR	NEW (	TURE TREAT CONSTRUCTION	REPERFORATE CURRENT FORMATION SIDETRACK TO REPAIR WELL TEMPORARILY ABANDON
✓ SUBSEQUENT REPORT	CHANGE TO PREVI	PLUG	ATOR CHANGE AND ABANDON	Users are an arministration of the second of
(Submit Original Form Only)  Date of work completion:	CHANGE WELL STA	ATUS PROD	BACK UCTION (START/RESUME)	WATER DISPOSAL WATER SHUT-OFF
2/24/2009	COMMINGLE PROD		AMATION OF WELL SITE MPLETE - DIFFERENT FORMATION	OTHER:
PETRO-HUNT LLC TEM	IPORARILY ABONI SET AT 4290'. SQI	JEEZED 136 SX CEME	SETTING THE FOLLO	
2. SPOT BALANCED 29:	2 SX CEMENT PLI	JG FROM 808'-1208'. P	RESSURE TEST TO 5	00#, HELD OK.
3. SPOT BALANCED 14	7 SX CEMENT PLU	JG FROM 27'-221'.		
ABANDONMENT WITNE	ESSED BY MARK .	JONES - UTAH OIL & G	AS DIVISION.	
MAME OF EASE FORM MICHAE	L HOMISTON		DISTRICT ENG	INEER

(This space for State use only)

n Homeston

RECEIVED

APR 0 6 2009

3/27/2009

PRECEIVED MAY 0 5 2009

DIV. OF OIL, GAS & MINING

Petro-Hunt, LLC

Sanpete County, UT Sec. 31-T15S-R3E **Ron Lamb 31A-4-1** Plan #1

43.639.20034

**Design: Gyrodata Gyro and Sperry MWD Survey** 

# Sperry Drilling Services **Standard Report**

06 April, 2009

Well Coordinates: 6,976,041.82 N, 1,605,521.44 E (39° 28' 15.34" N, 111° 37' 25.01" W)

Ground Level: 5,543.40 ft

Local Coordinate Origin:

Centered on Well Ron Lamb 31A-4-1

RKB 28' @ 5571.40ft (Original Well Elev)

Viewing Datum: TVDs to System:

North Reference:

True

Unit System:

API - US Survey Feet

Geodetic Scale Factor Applied

Version: 2003.14 Build: 57

**HALLIBURTON** 

# **HALLIBURTON**

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.38	342.58	200.00	0.63	-0.20	0.39	0.19
-		-	rodata Gyro Sur	-			
400.00	0.67	3.33	399.99	2.43	-0.33	1.76	0.17
600.00	0.44	22.04	599.98	4.31	0.03	3.49	0.14
800.00	0.56	18.12	799.97	5.95	0.62	5.16	0.06
1,000.00	0.61	12.97	999.96	7.92	1.16	7.07	0.04
1,100.00	0.52	350.94	1,099.96	8.89	1.21	7.87	0.23
1,200.00	0.73	26.61	1,199.95	9.90	1.42	8.82	0.43
1,300.00	0.76	26.00	1,299.94	11.07	2.00	10.10	0.03
1,400.00	0.60	22.14	1,399.94	12.15	2.49	11.26	0.17
1,500.00	0.96	24.34	1,499.93	13.40	3.03	12.59	0.36
1,600.00	0.93	31.25	1,599.91	14.86	3.80	14.21	0.12
1,700.00	1.46	27.60	1,699.89	16.68	4.81	16.28	0.54
1,800.00	1.69	28.11	1,799.85	19.11	6.09	19.00	0.23
1,900.00	1.93	22.22	1,899.80	21.97	7.42	22.09	0.30
1,900.00	1.00	22.22	1,000.00				
2,000.00	1.93	19.37	1,999.75	25.12	8.62	25.34	0.10
2,100.00	2.22	14.40	2,099.68	28.58	9.66	28.74	0.34
2,200.00	2.34	10.71	2,199.60	32.46	10.52	32.38	0.19
2,300.00	2.31	2.00	2,299.52	36.48	10.97	35.88	0.35
2,400.00	2.29	356.71	2,399.44	40.49	10.93	39.08	0.21
2,500.00	2.08	350.21	2,499.37	44.27	10.50	41.88	0.32
2,600.00	1.90	338.71	2,599.31	47.61	9.59	44.02	0.44
2,700.00	2.06	331.68	2,699.25	50.73	8.14	45.68	0.29
2,800.00	2.57	326.16	2,799.17	54.18	6.04	47.21	0.56
2,900.00	2.95	322.22	2,899.05	58.07	3.21	48.67	0.42
		204.05	0.000.00	E0 75	4.00	40.04	0.50
2,940.00	3.16	321.65	2,938.99	59.75	1.90	49.24	0.53
	rodata Gyro S		2 022 05	63.96	-0.68	51.10	0.99
3,025.00	3.54	334.54	3,023.85	03.90	-0.06	51.10	0.99
	MWD Survey	204 74	2 115 65	69.09	-3.93	53.30	1.09
3,117.00 3,210.00	4.07 4.73	321.71 324.53	3,115.65 3,208.37	74.80	-3.93 -8.20	55.37	0.75
3,302.00	4.73 5.27	329.01	3,300.02	81.51	-12.57	58.18	0.73
3,302.00	5.21	329.01	3,300.02	01.01	-12.07		0.72
3,334.00	5.33	327.14	3,331.89	84.02	-14.14	59.27	0.57
3,364.00	4.71	323.90	3,361.77	86.18	-15.62	60.14	2.27
3,394.00	4.85	329.52	3,391.67	88.27	-16.99	61.01	1.63
3,426.00	3.92	327.45	3,423.57	90.36	-18.26	61.93	2.95
3,457.00	3.29	334.02	3,454.51	92.05	-19.22	62.73	2.43
3,488.00	2.40	332.41	3,485.47	93,43	-19.91	63,43	2.88
3,520.00	2.15	330.14	3,517.45	94.54	-20.52	63.96	0.83
3,552.00	1.84	335.50	3,549.43	95.53	-21.03	64.45	1.13
3,583.00	0.88	327.27	3,580.42	96.18	-21.37	64.78	3.15
3,614.00	1.12	329.66	3,611.41	96.65	-21.65	64.99	0.79
3,644.00	1.58	321.74	3,641.41	97.22	-22.06	65.21	1.65
3,676.00	2,52	314.62	3,673.39	98.06	-22.83	65.43	3.04
3,706.00	3.13	318.50	3,703.35	99.14	-23.84	65.70	2.13
3,736.00	3.91	324.85	3,733.29	100.59	-24.97	66.19	2.90
3,768.00	4.35	327.58	3,765.21	102.51	-26.25	66.98	1.51
3,798.00	5.76	342.19	3,795.09	104.90	-27.32	68.27	6.33

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	
3,827.00	7.13	347.80	3,823.91	108.05	-28.15	70.31	5.19	
3,857.00	8.40	352.06	3,853.63	112.04	-28.84	73.12	4.64	
3,888.00	8.53	355.20	3,884.30	116.57	-29.35	76.47	1.55	
3,918.00	8.28	355.87	3,913.97	120.94	-29.69	79.78	0.89	
3,950.00	7.81	356.59	3,945.66	125.41	-29.99	83.21	1.50	
3,980.00	7.56	357.45	3,975.39	129.42	-30.20	86.31	0.92	
4,011.00	7.26	358.57	4,006.13	133.41	-30.34	89.44	1.07	
4,041.00	7.11	0.93	4,035.89	137.16	-30.35	92.45	1.10	
4,072.00	6.38	0.31	4,066.68	140.80	-30.31	95.41	2.37	
4,103.00	5.93	2.89	4,097.50	144.12	-30.22	98.14	1.70	
4,129.00	5.41	3.02	4,123.37	146.69	-30.09	100.28	2.00	
4,161.00	4.87	9.63	4,155.25	149.54	-29.78	102.76	2.50	
4,191.00	4.22	19.29	4,185.15	151.83	-29.21	104.95	3.34	
4,223.00	3.66	31.13	4,217.08	153.82	-28.29	107.09	3.08	
4,255.00	3.45	45.03	4,249.02	155.37	<i>-</i> 27.08	109.06	2.76	
4,290.00	3.64	63.87	4,283.95	156.61	-25.34	111.09	3.36	
4,320.00	3.88	81.02	4,313.89	157.18	-23.48	112.65	3.82	
4,351.00	4.05	89.01	4,344.81	157.37	-21.35	114.06	1.86	
4,382.00	3.70	91.57	4,375.74	157.36	-19.25	115.30	1.26	
4,413.00	2.20	97.59	4,406.70	157.25	-17.66	116.16	4.93	
4,426.00	1.45	87.49	4,419.69	157.23	-17.25	116.38	6.26	
4,507.00	0.34	313.85	4,500.68	157.44	-16.40	117.05	2.10	
4,537.00	0.49	298.70	4,530.68	157.56	-16.58	117.05	0.62	
4,567.00	0.75	306.18	4,560.68	157.74	-16.85	117.03	0.91	
4,599.00	0.75	291.93	4,592.68	157.94	-17.21	116.98	0.58	
4,629.00	0.77	249.59	4,622.68	157.94	-17.58	116.76	1.83	
4,660.00	1.14	222.90	4,653.67	157.65	-17.99	116.28	1.84	
4,690.00	1.59	227.48	4,683.66	157.15	-18.50	115.57	1.54	
4,721.00	1.49	217.32	4,714.65	156.53	-19.06	114.75	0.94	
4,752.00	1.28	222.56	4,745.64	155.96	-19.54	114.00	0.79	
4,783.00	0.58	194.50	4,776.64	155.55	-19.81	113.51	2.63	
4,814.00	0.53	164.43	4,807.64	155.26	-19.81	113.28	0.94	
4,845.00	0.44	155.88	4,838.64	155.02	-19.73	113.13	0.37	
4,876.00	0.73	126.28	4,869.64	154.79	-19.52	113.07	1.32	
4,908.00	0.68	132.66	4,901.63	154.54	<b>-</b> 19.21	113.05	0.29	
4,939.00	0.76	145.75	4,932.63	154.25	-18.96	112.96	0.59	
4,971.00	0.65	155.66	4,964.63	153.91	-18.77	112.81	0.51	
5,001.00	0.81	152.76	4,994.63	153.56	-18.60	112.63	0.55	
5,032.00	0.64	173.14	5,025.62	153.19	-18.48	112.40	0.99	
5,062.00	0.90	180.40	5,055.62	152.79	-18.46	112.09	0.92	
5,093.00	1.23	172.38	5,086.62	152.22	-18.42	111.65	1.17	
5,123.00	1.92	170.55	5,116.60	151.40	-18.29	111.07	2.31	
5,154.00	2.23	176.56	5,147.58	150.29	<del>-</del> 18.17	110.25	1.22	
5,184.00	2.48	174.28	5,177.56	149.06	-18.07	109.32	0.89	
5,214.00	2.53	175.99	5,207.53	147.76	-17.96	108.33	0.30	
5,245.00	2.71	179.39	5,238.50	146.34	-17.91	107.22	0.77	
5,275.00	2.69	175.38	5,268.46	144.93	-17.84	106.13	0.63	
5,306.00	2.81	180.78	5,299.43	143.44	-17.79	104.96	0.92	
5,336.00	2.92	184.67	5,329.39	141.95	-17.87	103.71	0.74	
5,368.00	2.90	181.50	5,361.35	140.33	-17.95	102.35	0.51	

## **HALLIBURTON**

Measured Depth (ft)	Inclination	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	
5,398.00	2.59	178.36	5,391.32	138.89	-17.95	101.20	1.15	
5,428.00	2.83	178.19	5,421.28	137,47	-17.91	100.08	0.80	
5,459.00	2.91	183.23	5,452.24	135.92	-17.93	98.82	0.85	
5,489.00	3.15	178.68	5,482.20	134.34	-17.96	97.53	1.13	
5,521.00	3.33	174.24	5,514.15	132.53	-17.84	96.14	0.96	
5,551.00	3,39	171.46	5,544.10	130.79	-17.62	94.87	0.58	
5,582.00	3.13	163.18	5,575.05	129.07	-17.24	93.71	1.73	
5,612.00	3.06	156.81	5,605.00	127.55	-16.69	92.82	1.17	
5,643.00	2,90	150.00	5,635.96	126.11	-15.97	92.08	1.25	
5,674.00	2.70	144.54	5,666.93	124.84	-15.16	91.54	1.07	
5,705.00	2.80	136.73	5,697.89	123.69	-14.21	91.18	1.25	
5,737.00	2.65	122.90	5,729.85	122.72	-13.06	91.08	2.10	
5,767.00	2.50	121.51	5,759.82	122.00	-11.92	91.18	0.54	
5,798.00	1.91	116.91	5,790.80	121.42	-10.88	91.32	1.99	
5,828.00	1.87	116.31	5,820.78	120.97	-10.00	91.49	0.15	
5,859.00	1.94	114.88	5,851.77	120.53	-9.07	91.68	0.27	
5,889.00	1.96	116.72	5,881.75	120.08	-8.15	91.87	0.22	
5,921.00	1.95	113.13	5,913.73	119.62	-7.16	92.08	0.38	
5,951.00	2.03	120.90	5,943.71	119.15	-6.23	92.25	0.94	
5,983.00	2.20	119.66	5,975.69	118.56	-5.21	92.38	0.55	
6,014.00	2.52	124.63	6,006.67	117.87	-4.13	92.47	1.22	
6,045.00	2.33	138.17	6,037.64	117.02	-3.15	92.36	1.94	
6,075.00	1.91	154.70	6,067.62	116.11	-2.53	92.00	2.46	
6,107.00	1.91	162.89	6,099.60	115.12	-2.15	91.43	0.85	
6,137.00	2.22	158.71	6,129.58	114.10	-1.79	90.82	1.15	
6,169.00	2.44	163.27	6,161.55	112.87	-1.37	90.08	0.90	
6,199.00	2.05	165.39	6,191.53	111.74	-1.05	89.36	1.33	
6,229.00 6,261.00	1.05 0.70	151.56 107.34	6,221.52 6,253.52	110.98 110.66	-0.78 -0.46	88.90 88.84	3.54 2.29	
				440.74	0.40	00.44	0.40	
6,291.00	0.81	50.25	6,283.51	110.74	-0.12	89.11	2.43	
6,322.00	0.85	43.22	6,314.51	111.05	0.21	89.55	0.35	
6,352.00	0.77	44.68	6,344.51	111.36	0.50	89.97	0.28	
6,384.00	0.81	43.50	6,376.50	111.67	0.81	90.41	0.13	
6,415.00	0.96 0.75	34.72 36.25	6,407.50	112.05 112.42	1.11 1.37	90.88 91.34	0.65 0.68	
6,446.00			6,438.50				1.20	
6,476.00	0.43	19.55	6,468.50	112.69	1.53	91.65 91.78	1.13	
6,507.00	0.09	42.68	6,499.50	112.81	1.58			
6,538.00	0.19	43.04	6,530.50	112.87	1.64	91.86	0.32	
6,569.00 6,599.00	0.07 0.12	300.10 149.27	6,561.50 6,591.50	112.92 112.90	1.65 1.65	91.91 91.89	0.70 0.61	
6,630.00	0.12	177.19	6,622.50	112.84	1.67	91.85	0.20	
	0.13	97.95		112.79	1.73	91.86	0.78	
6,660.00			6,652.50		1.78	91.81	1.20	
6,691.00	0.29	190.69	6,683.49	112.71				
6,721.00 6,752.00	0.33 0.37	142.55 164.36	6,713.49 6,744.49	112.57 112.40	1.81 1.90	91.72 91.63	0.85 0.45	
				112.40	1.95	91.53	0.43	
6,783.00 6,815.00	0.37 0.48	164.98 162.11	6,775.49 6,807.49	112,21	2.02	91.37	0.35	
6,815.00		174.48	6,807.49	111.66	2.02	91.37	0.35	
6,847.00	0.69		6,839.49		2.08	90.89	0.70	
6,877.00	0.68	169.55	6,869.49	111.30				
6,907.00	0.93	165.26	6,899.49	110.89	2.22	90.61	0.86	

## **HALLIBURTON**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
			6,930.48	110.40	2.34	90.29	0.11
6,938.00	0.96	166.39		109.91	2.50	89.99	0.45
6,969.00	0.95	158.05	6,961.48	109.38	2.66	89.66	0.70
7,000.00	1.08	167.81	6,992.47		2.79	89.23	0.65
7,031.00	1.28	168.77	7,023.47	108.76	2.79	69.23	0.05
7,063.00	1.23	170.50	7,055.46	108.07	2.92	88.75	0.20
7,093.00	1.35	166.58	7,085.45	107.41	3.05	88.30	0.50
7,125.00	1.32	167.18	7,117.44	106.68	3.22	87.82	0.10
7,156.00	1.24	162.96	7,148.43	106.01	3.40	87.38	0.40
7,187.00	1.27	157.41	7,179.43	105.37	3.63	87.00	0.40
7,218.00	1.12	164.45	7,210.42	104.77	3.84	86.64	0.68
7,249.00	1.45	165.56	7,241.41	104.09	4.02	86.21	1.07
7,279.00	1.32	153.58	7,271.40	103.42	4.27	85.81	1.06
7,310.00	1.53	157.67	7,302.39	102.71	4.58	85.43	0.75
7,340.00	1.48	156.21	7,332.38	101.99	4.89	85.03	0.21
7,372.00	1.49	150.93	7,364.37	101.25	5.26	84.65	0.43
7,402.00	1.76	158.68	7,394.36	100.48	5.62	84.24	1.16
7,432.00	1.72	147.94	7,424.35	99.67	6.02	83.83	1.09
7,464.00	1.92	149.95	7,456.33	98.80	6.55	83.44	0.66
7,494.00	2.26	161.67	7,486.31	97.80	6.99	82.90	1.81
7,525.00	2.27	168.33	7,517.29	96.62	7.30	82.13	0.85
7,555.00	2.22	171.89	7,547.26	95.46	7.50	81.32	0.49
7,585.00	1.64	156.35	7,577.25	94.49	7.76	80.69	2.59
7,616.00	1.34	146.10	7,608.24	93.78	8.14	80.35	1.29
7,647.00	1.55	158.12	7,639.23	93.09	8.50	80.00	1.19
7,679.00	1.48	163.23	7,671.22	92.30	8.78	79.53	0.48
7,711.00	1.70	176.78	7,703.20	91.43	8.92	78.91	1.36
7,741.00	2.00	178.04	7,733.19	90.46	8.97	78.16	1.01
7,772.00	1.91	179.97	7,764.17	89.40	8.99	77.32	0.36
7,802.00	2.08	190,03	7,794.15	88.37	8.89	76.43	1.30
7,833.00	2.11	184.49	7,825.13	87.24	8.75	75.44	0.66
7,863.00	2.35	186.50	7,855.11	86.08	8.64	74.44	0.84
7,895.00	2.35	183.25	7,887.08	84.78	8.52	73.32	0.42
7,925.00	2.52	181.95	7,917.05	83.50	8.47	72.26	0.60
7,955.00	2.25	181.78	7,947.03	82.25	8.43	71.23	0.90
7,986.00	1.90	180.90	7,978.01	81.13	8.40	70.31	1.13
8,016.00	1.80	177.37	8,007.99	80.16	8.41	69.54	0.51
8,046.00	2.12	179.64	8,037.97	79.14	8.44	68.73	1.10
8,077.00	2.03	180.79	8,068.95	78.02	8.43	67.82	0.32
8,107.00	2.04	177.56	8,098.93	76.95	8.45	66.98	0.38
8,137.00	2.49	178.53	8,128.91	75.77	8.49	66.05	1.51
8,168.00	2.32	174.57	8,159.88	74.47	8.57	65.05	0.77
8,200.00	2.49	172.39	8,191.86	73.14	8.72	64.06	0.60
8,232.00	2.62	171.98	8,223.82	71.72	8.91	63.04	0.41
8,262.00	2.80	171.37	8,253.79	70.32	9.12	62.03	0.61
8,294.00	2.34	181.08	8,285.76	68.89	9.22	60.95	1.97
8,324.00	2.19	180.94	8,315.73	67.71	9.20	59.98	0.50
8,356.00	2.24	192.34	8,347.71	66.49	9.06	58.91	1.38
8,386.00	1.93	190.60	8,377.69	65.42	8.84	57.92	1.05
8,416.00	2.01	183.64	8,407.67	64.39	8.71	57.02	0.84
8,447.00	1.93	185.98	8,438.66	63.33	8.63	56.11	0.37

Measured Depth (ft)	Inclination (°)	Azimuth	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
8,477.00	1.88	179.28	8,468.64	62.34	8.58	55.29	0.76
8,509.00	1.83	179.20	8,500.62	61.30	8.59	54.46	0.16
8,539.00	2.18	181.10	8,530.60	60.25	8.58	53.61	1.18
	2.18	176.07	8,561.58	59.05	8.62	52.66	0.73
8,570.00	2.29	170.07	0,301.36	39.03	0.02	32.00	0.73
8,601.00	2.27	181.50	8,592.56	57.81	8.64	51.68	0.70
8,632.00	2.31	181.85	8,623.53	56.58	8.61	50.66	0.14
8,663.00	1.95	186.19	8,654.51	55.43	8.53	49.69	1.27
8,695.00	1.95	187.44	8,686.49	54.35	8.40	48.74	0.13
8,725.00	1.91	182.31	8,716.47	53.34	8.31	47.88	0.59
8,757.00	1.90	183.17	8,748.46	52.28	8.26	47.00	0.09
8,789.00	1.81	174.30	8,780.44	51.25	8.28	46.18	0.94
8,819.00	1.92	179.45	8,810.42	50.27	8.34	45.42	0.67
8,851.00	2.06	176.97	8,842.40	49.16	8.37	44.55	0.51
8,882.00	2.17	176.15	8,873.38	48.02	8.44	43.67	0.37
8,913.00	2.31	177.35	8,904.36	46.81	8.51	42.74	0.48
8,943.00	2.16	173.58	8,934.34	45.64	8.60	41.85	0.70
8,973.00	2.37	175.09	8,964.31	44.46	8.72	40.97	0.73
9,004.00	2.26	175.33	8,995.29	43.22	8.82	40.03	0.36
9,034.00	2.16	179.10	9,025.27	42.06	8.88	39.13	0.59
9,065.00	1.85	186.01	9,056.25	40.98	8.83	38.24	1.27
9,095.00	1.72	186.98	9,086.23	40.05	8.73	37.43	0.44
9,125.00	1.67	188.55	9,116.22	39.17	8.61	36.65	0.23
9,157.00	1.72	191.85	9,148.20	38.24	8.44	35.80	0.34
9,187.00	1.81	191.33	9,178.19	37.34	8.26	34.96	0.30
9,218.00	1.86	189.05	9,209.17	36.36	8.08	34.07	0.29
9,248.00	1.94	186.64	9,239.16	35.37	7.95	33.20	0.38
9,280.00	2.06	184.19	9,271.14	34.26	7.84	32.24	0.46
9,310.00	2.17	182.07	9,301.12	33.16	7.78	31.31	0.45
9,342.00	2.18	182.39	9,333.10	31.94	7.73	30.31	0.05
9,372.00	2.11	185.18	9,363.07	30.82	7.66	29.36	0.42
9,403.00	2.01	185.62	9,394.05	29.71	7.55	28.41	0.33
9,434.00	1.97	184.68	9,425.04	28.64	7.46	27.49	0.17
9,466.00	1.82	188.28	9,457.02	27.59	7.34	26.57	0.60
9,498.00	1.88	189.19	9,489.00	26.57	7.18	25.65	0.21
9,528.00	1.84	193.02	9,518.99	25.61	7.00	24.77	0.44
9,558.00	1.96	193.30	9,548.97	24.65	6.77	23.86	0.40
9,590.00	2.10	199.39	9,580.95	23.56	6.45	22.80	0.80
9,620.00	2.17	198.34	9,610.93	22.50	6.09	21.73	0.27
9,651.00	2.17	193.53	9,641.91	21.37	5.77	20.63	0.59
9,682.00	1.89	194.20	9,672.89	20.31	5.50	19.62	0.91
9,713.00	1.96	192.35	9,703.87	19.30	5.26	18.66	0.30
9,743.00	1.87	191.29	9,733.85	18.31	5.06	17.75	0.32
9,774.00	1.85	189.89	9,764.84	17.33	4.87	16.84	0.16
9,805.00	1.92	186.17	9,795.82	16.32	4.73	15.94	0.45
9,836.00	1.72	182.30	9,826.80	15.33	4.66	15.11	0.76
9,867.00	1.73	177.62	9,857.79	14.40	4.66	14.36	0.46
9,898.00	1.56	171.32	9,888.78	13.52	4.74	13.70	0.80
9,928.00	1.64	160.78	9,918.76	12.71	4.94	13.17	1.01
9,960.00	1.56	156.17	9,950.75	11.88	5.27	12.69	0.47
9,990.00	1.73	147.99	9,980.74	11.12	5.68	12.32	0.96

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
10,021.00	1.68	138.14	10,011.73	10.38	6.23	12.05	0.96	
10,052.00	1.85	132.32	10,042.71	9.71	6.90	11.91	0.80	
10,083.00	1.81	123.65	10,073.70	9.10	7.68	11.88	0.90	
10,113.00	2.03	121.02	10,103.68	8.57	8.53	11.95	0.79	
10,113.00								
10,145.00	2.20	115.77	10,135.66	8.01	9.57	12.12	0.80	
10,168.00	2.53	116.00	10,158.64	7.59	10.42	12.29	1.44	
10,199.00	2.23	101.59	10,189.61	7.17	11.63	12.67	2.15	
10,230.00	2.84	101.15	10,220.58	6.90	12.97	13.25	1.97	
10,261.00	2.68	98.77	10,251.54	6.64	14.44	13.91	0.63	
10,291.00	1.72	128.13	10,281.52	6.26	15.49	14.22	4.84	
10,322.00	1.87	120.28	10,312.51	5.71	16.29	14.26	0.93	
10,353.00	0.92	154.89	10,343.50	5.23	16.83	14.20	3.97	
10,385.00	0.41	187.17	10,375.50	4.89	16.93	13.97	1.92	
10,416.00	0.98	168.08	10,406.49	4.52	16.97	13.70	1.96	
10,447.00	0.68	168.83	10,437.49	4.08	17.06	13.40	0.97	
10,508.00	1.11	145.65	10,498.48	3.24	17.46	12.96	0.91	
10,569.00	1.11	134.80	10,559.47	2.33	18.21	12.68	0.34	
10,599.00	1.29	137.71	10,589.47	1.88	18.65	12.57	0.63	
10,629.00	1.01	128.41	10,619.46	1.46	19.08	12.49	1.12	
10.690.00	0.15	71.69	10,680.46	1,15	19.58	12.54	1.53	
10,751.00	0.42	111.37	10,741.46	1.10	19.86	12.66	0.52	
10,813.00	0.33	150.35	10,803.45	0.86	20.16	12.65	0.43	
10,874.00	0.50	134.80	10,864.45	0.52	20.44	12.54	0.33	
10,936.00	0.91	70.85	10,926.45	0.49	21.10	12.90	1.33	
10,997.00	1.68	55.17	10,987.43	1.16	22.29	14.15	1.38	
11,028.00	1.38	64.32	11,018.42	1.58	23.00	14.91	1.25	
11,059.00	2.05	48.76	11,049.41	2.11	23.75	15.78	2.61	
11,090.00	1.59	60.61	11,080.39	2.68	24.54	16.71	1.91	
11,120.00	1.31	82.25	11,110.38	2.94	25.25	17.33	2.03	
11,152.00	2.07	61.31	11,142.37	3.26	26.11	18.11	3.02	
11,182.00	2.19	68.27	11,172.35	3.73	27.12	19.09	0.95	
11,213.00	2.43	67.47	11,203.32	4.21	28.28	20.15	0.78	
11,244.00	2.34	75.88	11,234.30	4.61	29.50	21.21	1.16	
11,275.00	2.01	74.93	11,265.27	4.91	30.64	22.12	1.07	
11,305.00	2.01	80.74	11,295.26	5.13	31.67	22.91	0.68	
11,337.00	1.59	82.11	11,327.24	5.28	32.66	23.62	1.32	
11,368.00	1.29	69.48	11,358.23	5.46	33.41	24.21	1.40	
11,398.00	1.65	60.59	11,388.22	5.79	34.11	24.89	1.42	
11,429.00	1.86	65.83	11,419.21	6.22	34.95	25.73	0.85	
11,459.00	1.68	61.20	11,449.19	6.63	35.78	26.55	0.77	
11,489.00	1.98	50.59	11,479.18	7.17	36.57	27.46	1.50	
11,520.00	1.98	64.40	11,510.16	7.74	37.47	28.45	1.54	
11,550.00	1.66	78.12	11,540.14	8.05	38.36	29.23	1.79	
11,581.00	1.36	68.41	11,571.13	8.28	39.14	29.88	1.27	
11,613.00	1.53	79.11	11,603.12	8.50	39.91	30.51	0.99	
11,643.00	1.57	79.40	11,633.11	8.65	40.71	31.11	0.14	
11,673.00	1.97	80.43	11,663.10	8.81	41.62	31.78	1.34	
11,705.00	1.97	82.13	11,695.08	8,98	42.71	32.56	0.18	
11,737.00	1.58	85.87	11,727.06	9.09	43.69	33.23	1.27	
11,769.00	1.50	78.07	11,759.05	9.21	44.54	33.82	0.70	

#### Design Report for Ron Lamb 31A-4-1 - Plan #1 - Gyrodata Gyro and Sperry MWD Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
11,800.00	0.88	87.55	11,790.04	9.30	45.18	34.28	2.09
11,819.00	0.16	83.93	11,809.04	9.31	45.35	34.39	3.79
11,831.00	0.39	246.43	11,821.04	9.30	45.33	34.36	4.54
11,847.00	1.05	251.79	11,837.04	9.23	45.14	34.20	4.14
11,863.00	1.88	248.64	11,853.04	9.09	44.76	33.85	5.21
11,895.00	1.38	260.22	11,885.02	8.83	43.89	33.13	1.86
11,927.00	2.14	278.77	11,917.01	8.86	42.92	32.58	2.94
11,959.00	2.43	272.49	11,948.98	8.98	41.65	31.92	1.20
11,989.00	2.55	268.48	11,978.95	8.99	40.35	31.16	0.70
12,022.00	2.37	272.90	12,011.92	9.00	38.93	30.33	0.79
12,054.00	2.41	273.42	12,043.90	9.07	37.60	29.60	0.14
12,086.00	2.13	275.26	12,075.87	9.17	36.34	28.93	0.90
12,118.00	1.73	271.17	12,107.85	9.23	35.26	28.34	1.32
12,150.00	1.87	267.22	12,139.84	9.22	34.26	27.73	0.58
12,182.00	1.99	282.15	12,171.82	9.31	33.19	27.18	1.61
12,214.00	2.31	279.31	12,203.80	9.53	32.01	26.66	1.05
12,246.00	2.37	281.55	12,235.77	9.77	30.73	26.08	0.34
12,277.00	1.80	293.36	12,266.75	10.09	29.65	25.71	2.29
12,309.00	2.55	286.08	12,298.73	10.49	28.51	25.35	2.49
12,341.00	2.50	283.18	12,330.69	10.84	27.14	24.82	0.43
12,373.00	2.46	289.58	12,362.66	11.23	25.82	24.35	0.87
12,405.00	3.01	284.26	12,394.63	11.67	24.36	23.84	1.89
12,437.00	2.73	282.44	12,426.59	12.04	22.80	23.21	0.92
12,469.00	2.88	284.79	12,458.55	12.41	21.28	22.61	0.59
12,488.00	3.06	284.19	12,477.52	12.66	20.32	22.24	0.96
12,520.00	2.98	284.62	12,509.48	13.07	18.69	21.61	0.26
12,551.00	3.00	286.89	12,540.44	13.51	17.13	21.04	0.39
12,583.00	2.98	285.93	12,572.39	13.99	15.53	20.47	0.17
12,604.00	2.97	285.51	12,593.37	14.28	14.48	20.09	0.11
Final Sperry	MWD Survey						
12,670.00	2.97	285.51	12,659.28	15.19	11.19	18.87	0.00

Survey Projection to TD of Sperry Directional Work

#### **Design Annotations**

Measured	Vertical	Local Coor	dinates	
Depth	Depth	+N/-S	+E/-W	Comment
(ft)	(ft)	(ft)	(ft)	
200.00	200.00	0.63	-0.20	Surveys from 200.00ft to 2940.00ft are Gyrodata Gyro Surveys
2,940.00	2,938.99	59.75	1.90	Tie-On to Gyrodata Gyro Survey
3,025.00	3,023.85	63.96	-0.68	First Sperry MWD Survey
12,604.00	12,593.37	14.28	14.48	Final Sperry MWD Survey
12,670.00	12,659.28	15.19	11.19	Survey Projection to TD of Sperry Directional Work

#### **Vertical Section Information**

	Angle			Origin	Orig	in	Start
	Туре	Target	Azimuth (°)	Type	+N/_S (ft)	+E/-W (ft)	TVD (ft)
TD		No Target (Freehand)	36.36	Slot	0.00	0.00	0.00

#### Design Report for Ron Lamb 31A-4-1 - Plan #1 - Gyrodata Gyro and Sperry MWD Survey

#### Survey tool program

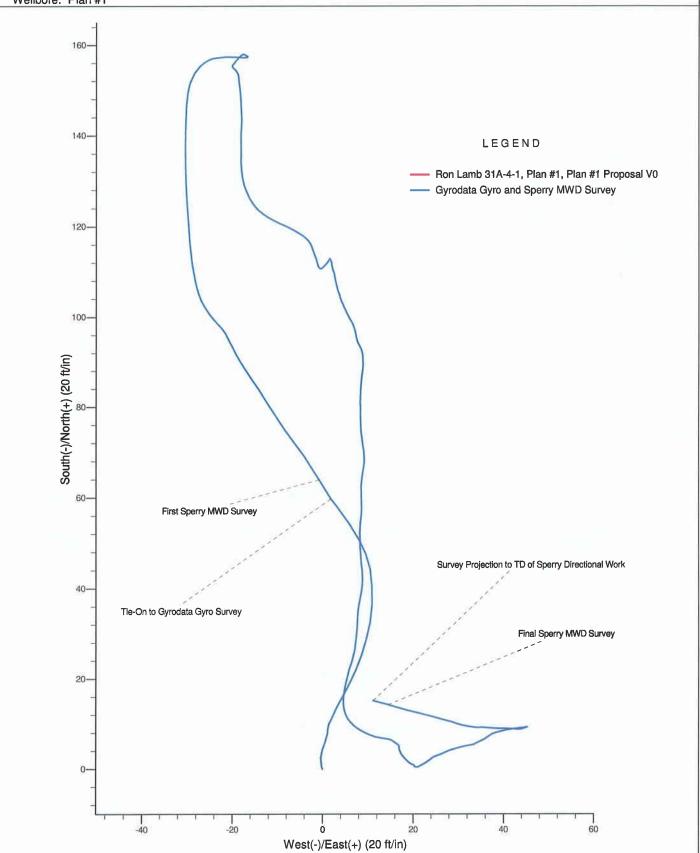
From To Survey/Plan Survey Tool (ft) (ft)

200.00 2,940.00 Gyrodata Gyro Surveys 3,025.00 12,670.00 Sperry MWD Surveys NS-GYRO-MS MWD Project: Sanpete County, UT Site: Sec. 31-T15S-R3E Well: Ron Lamb 31A-4-1

# Petro-Hunt, LLC

**HALLIBURTON** 

Wellbore: Plan #1



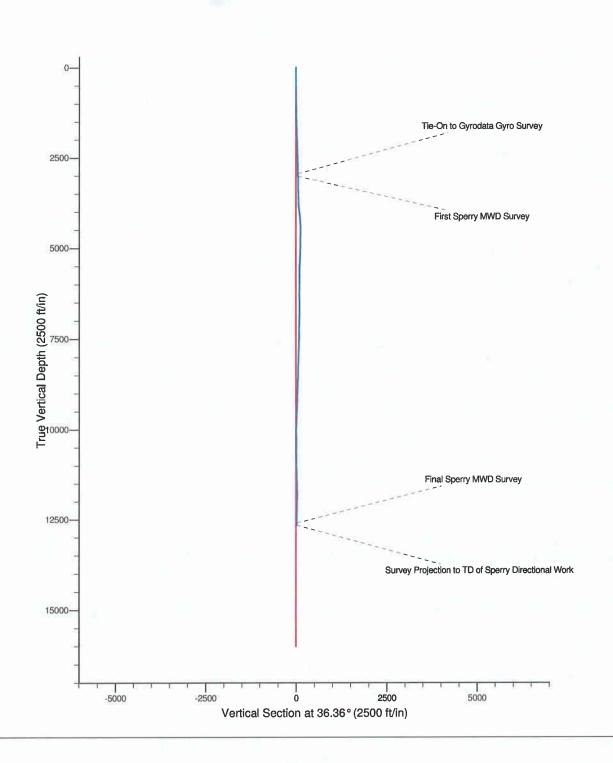
Project: Sanpete County, UT Site: Sec. 31-T15S-R3E Well: Ron Lamb 31A-4-1

# Petro-Hunt, LLC

**HALLIBURTON** 



Ron Lamb 31A-4-1, Plan #1, Plan #1 Proposal V0Gyrodata Gyro and Sperry MWD Survey



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t Tops of work		VV	ELL. L	,	WELL			<b>104</b>	• • • • • • • • • • • • • • • • • • • •		***************************************			N/A					
b. TYPE OF WOR!  NEW WELL   VELL	HORIZ.	DE EN	EP-	]	RE- ENTRY		DIFF. RESVR.		отн	ER						и мимв ИВ 31		-1	
2. NAME OF OPERA	ATOR:							<del></del>			· . · · · · · · · · · · · · · · · · · ·			PI NUMI					
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258 119TH		<b>V</b> ci	TY KIL	LDEE	R	STATE	ND	ZIP <b>586</b>	340		1) 863-	6622		WILD			MLDOF		
4. LOCATION OF W AT SURFACE: AT TOP PRODU	1569' FN	NL & 1				. '	Per R	- HS evie	M					OTR/OT MERIDIA ENE	R, SEC AN: 31		OWNS	SHIP, RANG	
AT TOTAL DEPT	⊬ 15 <del>69</del>	FNL 8	115±											COUNT			1	3. STATE	UTAH
14. DATE SPUDDED 11/28/2008		. DATE T. 2/17/2		HED:		TE COMPL 24/2009		A	BANDON	ED 🔽	READY TO	PRODUC	<b>□</b>			ONS (DF = 557		RT, GL):	
18. TOTAL DEPTH:	1 2,	670		19. PLUG	BACK T		10		20. iF I	MULTIPLE CO	OMPLETION	S, HOW N	IANY?*	21. DE	PTH BI			4,290	
22. TYPE ELECTRIC	TVD 12,			GS RUN (	Submit o	TVD copy of each			<u> </u>	23.							TVD	4,290	<u> </u>
AT 1026' - 0 12670' - FM				0' - GF	R/HR:	SLA/DI	P/CAI	.; AT		WAS DST	L CORED? RUN? NAL SURVE	r	NO NO NO	<b>V</b>	YES [ YES [ YES [		(Subn	nit analysis) nit report) nit copy)	
24. CASING AND L	NER RECORD	(Report a	all string:	set in w	ell)									`					
HOLE SIZE	SIZE/GRA	DE	WEIGHT	(#/fL)	TO	P (MD)	вотто	OM (MD)		EMENTER EPTH	CEMENT 1 NO. OF S		SLUF		CE	MENT T	OP **	AMOUNT	PULLED
48"	30	X52	23	4		0	8	30			G	675	10	9		0			0
26"	Contract to the second	K55	94			0		026			СВМ	1,435	58	33		0			0
17.5"	13 3/8 F	ICP	68	3		0	4,	490			ECO/G	1,946	1,0	41	╄	0			0
							<u> </u>		*****		. 4				╂				
	-					<del></del>	<del></del>			-19.1		-			+				
25. TUBING RECOR	L 8D						L					I			1	·		1	
SIZE	DEPTH S	ET (MD)	PACK	ER SET (I	MD)	SIZE		DEPTH	SET (MD)	PACKE	R SET (MD)		SIZE	T	DEPTH	SET (N	(D)	PACKER S	ET (MD)
26. PRODUCING IN											RATION REC								
FORMATION	NAME	TOP	(MD)	вотто	M (MD)	ТОР	(TVD)	BOTTO	I (TVD)	INTERVA	L (Top/Bot -	MD)	SIZE	NO. HC				ATION STA	rus
(A)				<b> </b>		-		<del> </del>				_				Open [	<u></u> —	Squeezed	<del> </del>
(C)				<del> </del>		+		<del>                                     </del>		<u> </u>	<del></del>				-	Open [	=	Squeezed Squeezed	
(D)					*	+					·					Open [	=	Squeezed	
28. ACID, FRACTUR	RE, TREATME	NT. CEME	NT SQUI	EEZE. ETC	C.			<u> </u>		· · · · · · · · · · · · · · · · · · ·					!	Орен		Squeezeu	
	NTERVAL.	,	Γ						AM	DUNT AND T	YPE OF MAT	ERIAL							. <del></del>
4203' - 4490	•		F7S	V @ 4	290'	SOZD	168.9	SX CM		<del> </del>	OTTED		CON	TOP					
808' - 1208'						SX BA					OTTED	00 0,	·	101.					
10' - 221'		***	SPO	TTED	147	SX BA	LANC	ED CM	IT PLU	JG.					,				
29. ENCLOSED ATT	ACHMENTS:	***************************************			·								·			30.	WELI	STATUS:	
	RICAL/MECHA Y NOTICE FO			CEMENT	VERIFI	CATION		GEOLOGK		=	DST REPOR	г []	· 	TIONAL		-		TA	
(5/2000)							(CO	NTINUE	D ON E	BACK)			Y € €			EIV 6 2			

DIV. OF OIL, GAS & MINING

#### 31. INITIAL PRODUCTION

#### INTERVAL A (As shown in item #26)

DATE FIRST PR	ODUCED:	TEST DATE:		HOURS TESTED	HOURS TESTED:		OIL – BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG, PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL BBL:	GAS - MCF;	WATER - BBL:	INTERVAL STATUS:
				INT	ERVAL B (As shor	wn in item #26)			········	
DATE FIRST PR	ODUCED:	TEST DATE:		HOURS TESTE	):	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:
				INT	ERVAL C (As sho	wn in item #26)				
DATE FIRST PR	ODUCED:	TEST DATE:		HOURS TESTER	<b>D</b> :	TEST PRODUCTION RATES: →	OIL – BBL:	GAS MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG, PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL BBL:	GAS MCF:	WATER - BBL:	INTERVAL STATUS:
				INT	ERVAL D (As sho	wn in item #26)				
DATE FIRST PR	ODUCED:	TEST DATE:		HOURS TESTED	);	TEST PRODUCTION RATES: →	OIL BBL:	GAS - MCF:	WATER - 88L:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:

#### 33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Quat. Alluvium 25 140 SS/SLST/SH, WATER BEARING LMST/SS/SH, WATER BEARING SS/SLST/SH, WATER BEARING LMST/SS/SH, WATER BEARING SS/SLST/SH, WATER BEAR	Top leasured Depth)	Name	Descriptions, Contents, etc.	Bottom (MD)	Tap (MD)	Formation
Miocene Volcanic 2,210 2,320 RHYOLITE, WATER BEARING Eocene Colton 2,320 3,475 SH/SLST/SS, WATER BEARING			SS/SLST/SH, WATER BEARING	140	25	Quat. Alluvium
Eocene Colton 2,320 3,475 SH/SLST/SS, WATER BEARING			LMST/SS/SH, WATER BEARING	2,210	140	Miocene Moroni
			RHYOLITE, WATER BEARING	2,320	2,210	Miocene Volcanic
Paleo. Flag./Nhor 3,475 4,445 LMST/SH/SS, WATER BEARING			SH/SLST/SS, WATER BEARING	3,475	2,320	Eocene Colton
			LMST/SH/SS, WATER BEARING	4,445	3,475	Paleo. Flag./Nhor
						-
		·				

<sup>35.</sup> ADDITIONAL REMARKS (Include plugging procedure)

#### PLEASE SEE ATTACHED PLUGGING SCHEMATIC.

36. I hereby certify that the foregoing and attached information is complete	orrect as determined from all agailable records.
NAME (PLEASE PRINT) MIKE ENDRUD	TITLE DISTRICT MANAGER
SIGNATURE	

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- · reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- · drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests
- \* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

\*\* ITEM 24: Cement Top - Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to:

Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210 Box 145801

Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

801-359-3940 Fax:

(5/2000)

### PETRO HUNT L. L. C.

DRILLING PROGRAM c]v COMPANY NAME PETRO HUNT L. L. C. DATE 6/28/2010 12670 RKB WELL NAME RON LAMB 31A-4-1 TD: FIELD WILDCAT PROSPECT: WALES STATE: UTAH LOCATION **SECTION 31, T 15S, R 3E** SANPETE COUNTY: **OBJECTIVE ZONE(S)** JURASSIC LOWER TWIN CREEK AND JURASSIC NAVAJO WATER DEPTH: N/A **GEOLOGICAL MECHANICAL** CASING LOGS / SURVEYS HOLE MUD TYPE / SIZE SIZE MUD WEIGHT DEPTH DID NOT CUT CASING STRINGS 80' 30" X 0.375" Conductor Pipe LEFT WELLHEAD &INSTALLED DRY HOLE TREE SPOTTED SURFACE CEMENT PLUG 10 - 221' WELLHEAD EQUIPMENT LEFT ON WELL: 147 SX, 15.8 PPG, 1.15 YLD - CLASS G FMC - 20-" SOW X 20 3/4" 3K STARTING HEAD VISUALLY INSPECTED PLUG FMC - 20 3/4" 3K X 13 5/8" 5K CASING SPOOL FMC - 13 5/8" 5K DRY HOLE TREE ON TOP 10.3 PPG SPOTTED CEMENT PLUG 808 - 1,208' SALT MUD 292 SX, 15.8 PPG, 1.23 YLD - CLASS G 26" 9.0 PPG PRESSURE TESTED PLUG WITH 500 PSI 20" 1026' RKB 94# J/K55 BTC Brine F. G. 12.1 PPG 10.3 PPG SALT MUD EZSV @ 4,290', TAGGED TOP OF CEMENT @ 4,203' SQUEEZED 168 SX CEMENT BELOW RETAINER 4290-4490'  $\times$ 17 1/2" 9.0 PPG SPOTTED 68 SX CEMENT ON TOP OF RETAINER 13 3/8" 204 SX. 15.8 PPG, 1.23 YLD - CLASS G + 15% SALT 4490' RKB 68# HCL80 BTC Brine F. G. 14.4 PPG / SHOE TEST 11.5 PPG THIS TEMPORARY ABANDONMENT SCHEMATIC WAS APPROVED BY 10.3 PPG **DUSTIN DOUCET 2-21-09 @ 1530 HR.** NO HYDROCARBONS IN OPEN HOLE SALT MUD HOME #(801) 733-0983 12 1/4" 10.4 PPG TD 12670' RKB Salt Saturated

# Petro-Hunt, LLC

Sanpete County, UT Sec. 31-T15S-R3E Ron Lamb 31A-4-1 Plan #1

**Design: Gyrodata Gyro and Sperry MWD Survey** 

# **Sperry Drilling Services**Standard Report

06 April, 2009

Well Coordinates: 6,976,041.82 N, 1,605,521.44 E (39° 28' 15.34" N, 111° 37' 25.01" W)

Ground Level: 5,543.40 ft

Local Coordinate Origin:

Viewing Datum:

TVDs to System: North Reference:

Unit System:

Geodetic Scale Factor Applied

Version: 2003.14 Build: 57

Centered on Well Ron Lamb 31A-4-1

RKB 28' @ 5571.40ft (Original Well Elev)

N

True

API - US Survey Feet

RECEIVED
JUL 2 6 2010

HALLIBURTON

DIV. OF OIL, GAS & MINING

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.38	342.58	200.00	0.63	-0.20	0.39	0.19
Surveys from	n 200.00ft to 29	40.00ft are Gy	rodata Gyro Sur	veys			
400.00	0.67	3.33	399.99	2.43	-0.33	1.76	0.17
600.00	0.44	22.04	599.98	4.31	0.03	3.49	0.14
800.00	0,56	18.12	799.97	5.95	0.62	5.16	0.06
1,000.00	0.61	12.97	999.96	7.92	1.16	7.07	0.04
1,100.00	0.52	350.94	1,099.96	8.89	1,21	7.87	0.23
1,200.00	0.73	26.61	1,199.95	9.90	1.42	8.82	0.43
1,300.00	0.76	26.00	1,299.94	11.07	2.00	10.10	0.03
1,400.00	0.60	22.14	1,399.94	12.15	2.49	11.26	0.17
1,500.00	0.96	24.34	1,499.93	13.40	3.03	12.59	0.36
1,600.00	0.93	31.25	1,599.91	14.86	3.80	14.21	0.12
1,700.00	1.46	27.60	1,699.89	16.68	4.81	16.28	0.54
1,800.00	1.69	28.11	1,799.85	19.11	6.09	19.00	0.23
1,900.00	1.93	22.22	1,899.80	21.97	7.42	22.09	0.30
2,000.00	1.93	19.37	1,999.75	25.12	8.62	25.34	0.10
2,100.00	2.22	14.40	2,099.68	28.58	9.66	28.74	0.34
2,200.00	2.34	10.71	2,199.60	32.46	10.52	32.38	0.19
2,300.00	2.31	2.00	2,299.52	36.48	10.97	35.88	0.35
2,400.00	2.29	356.71	2,399.44	40.49	10.93	39.08	0.21
2,500.00	2.08	350.21	2,499.37	44.27	10.50	41.88	0.32
2,600.00	1.90	338.71	2,599.31	47.61	9.59	44.02	0.44
2,700.00	2.06	331.68	2,699.25	50.73	8.14	45.68	0.29
2,800.00	2.57	326.16	2,799.17	54.18	6.04	47.21	0.56
2,900.00	2.95	322.22	2,899.05	58.07	3.21	48.67	0.42
2,940.00	3.16	321.65	2,938.99	59.75	1.90	49.24	0.53
	rodata Gyro Si	•	0.000.05				
3,025.00	3.54	334.54	3,023.85	63.96	-0.68	51.10	0.99
	MWD Survey	004.74	0.445.05	00.00	• • •		
3,117.00 3,210.00	4.07 4.73	321.71	3,115.65	69.09	-3.93	53.30	1.09
3,302.00	4.73 5.27	324.53	3,208.37	74.80	-8.20	55.37	0.75
		329.01	3,300.02	81.51	-12.57	58.18	0.72
3,334.00	5.33	327.14	3,331.89	84.02	-14.14	59.27	0.57
3,364.00	4.71	323.90	3,361.77	86.18	-15.62	60.14	2.27
3,394.00	4.85	329.52	3,391.67	88.27	-16.99	61.01	1.63
3,426.00	3.92	327.45	3,423.57	90.36	-18.26	61.93	2.95
3,457.00	3.29	334.02	3,454.51	92.05	-19.22	62.73	2.43
3,488.00	2.40	332.41	3,485.47	93.43	-19.91	63.43	2.88
3,520.00	2.15	330.14	3,517.45	94.54	-20.52	63.96	0.83
3,552.00	1.84	335.50	3,549.43	95.53	-21.03	64.45	1.13
3,583.00	0.88	327.27	3,580.42	96.18	-21.37	64.78	3.15
3,614.00	1.12	329.66	3,611.41	96.65	-21.65	64.99	0.79
3,644.00	1.58	321.74	3,641.41	97.22	-22.06	65.21	1.65
3,676.00	2.52	314.62	3,673.39	98.06	-22.83	65.43	3.04
3,706.00	3.13	318.50	3,703.35	99.14	-23.84	65.70	2.13
3,736.00	3.91	324.85	3,733.29	100.59	-24.97	66.19	2.90
3,768.00	4.35	327.58	3,765.21	102.51	-26.25	66.98	1.51
3,798.00	5.76	342.19	3,795.09	104.90	-27.32	68.27	6.33

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100 <del>ft</del> )	
3,827.00	7.13	347.80	3,823.91	108.05	-28.15	70.31	5.19	
3,857.00	8.40	352.06	3,853.63	112.04	-28.84	73.12	4.64	
3,888.00	8,53	355.20	3,884.30	116.57	-29.35	76.47	1.55	
3,918.00	8.28	355.87	3,913.97	120.94	-29.69	79.78	0.89	
3,950.00	7.81	356.59	3,945.66	125.41	-29.99	83.21	1.50	
3,980.00	7.56	357.45	3,975.39	129.42	-30.20	86,31	0.92	
4,011.00	7.26	358.57	4,006.13	133.41	-30.34	89.44	1.07	
4,041.00	7.11	0.93	4,035.89	137.16	-30.35	92.45	1.10	
4,072.00	6.38	0.31	4,066.68	140.80	-30.31	95.41	2.37	
4,103.00	5.93	2.89	4,097.50	144.12	-30.22	98.14	1.70	
4,129.00	5.41	3.02	4,123.37	146.69	-30.09	100.28	2.00	
4,161.00	4.87	9.63	4,155.25	149.54	-29.78	102.76	2.50	
4,191.00	4.22	19.29	4,185.15	151.83	-29.21	104.95	3.34	
4,223.00	3.66	31.13	4,217.08	153.82	-28.29	107.09	3.08	
4,255.00	3.45	45.03	4,249.02	155.37	-27.08	109.06	2.76	
4,290.00	3.64	63.87	4,283.95	156.61	-25.34	111.09	3.36	
4,320.00	3.88	81.02	4,313.89	157.18	-23.48	112.65	3.82	
4,351.00	4.05	89.01	4,313.89	157.16	-21.35			
4,382.00	3.70	91.57	4,344.61	157.36	-21.35 -19.25	114.06 115.30	1.86 1.26	
4,413.00	2.20	97.59	4,406.70	157.25	-17.66	116.16	4.93	
4,426.00	1.45	87.49	4,419.69	157.23	-17.25	116.38	6.26	
4,507.00	0.34	313.85	4,500.68	157.44	-16.40	117.05	2.10	
4,537.00	0.49	298.70	4,530.68	157.56	-16.58	117.05	0.62	
4,567.00	0.75	306.18	4,560.68	157.74	-16.85	117.03	0.91	
4,599.00	0.75	291.93	4,592.68	157.94	-17.21	116.98	0.58	
4,629.00	0.77	249.59	4,622.68	157.94	-17.58	116.76	1.83	
4,660.00	1.14	222.90	4,653.67	157.65	-17.99	116.28	1.84	
4,690.00	1.59	227.48	4,683.66	157.15	-18.50	115.57	1.54	
4,721.00	1.49	217.32	4,714.65	156.53	-19.06	114.75	0.94	
4,752.00	1.28	222.56	4,745.64	155.96	-19.54	114.00	0.79	
4,783.00	0.58	194.50	4,776.64	155.55	-19.81	113.51	2.63	
4,814.00	0.53	164.43	4,807.64	155.26	-19.81	113.28	0.94	
4,845.00	0.44	155.88	4,838.64	155.02	-19.73	113.13	0.37	
4,876.00	0.73	126.28	4,869.64	154.79	-19.52	113.07	1.32	
4,908.00	0.68	132.66	4,901.63	154.54	-19.21	113.05	0.29	
4,939.00	0.76	145.75	4,932.63	154.25	-18.96	112.96	0.59	
4,971.00	0.65	155.66	4,964.63	153.91	-18.77	112.81	0.51	
5,001.00	0.81	152.76	4,994.63	153.56	-18.60	112.63	0,55	
5,032.00	0.64	173.14	5,025.62	153.19	-18.48	112.40	0.99	
5,062.00	0.90	180.40	5,055.62	152.79	-18.46	112.09	0.92	
5,093.00	1.23	172.38	5,086.62	152.22	-18.42	111.65	1.17	
5,123.00	1.92	170.55	5,116.60	151.40	-18.29	111.07	2.31	
5,154.00	2.23	176.56	5,147.58	150.29	-18.17	110.25	1.22	
5,184.00	2.48	174.28	5,177.56	149.06	-18.07	109.32	0.89	
5,214.00	2.53	175.99	5,207.53	147.76	-17.96	108.33	0.30	
5,245.00	2.71	179.39	5,238.50	146.34	-17.91	107.22	0.77	
5,275.00	2.69	175.38	5,268.46	144.93	-17.84	106.13	0.63	
5,306.00	2.81	180.78	5,299.43	143.44	-17.79	104.96	0.92	
5,336.00	2.92	184.67	5,329.39	141.95	-17.87	103.71	0.74	
5,368.00	2.90	181.50	5,361.35	140.33	-17.95	102.35	0.51	

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
5,398.00	2.59	178.36	5,391.32	138.89	-17.95	101.20	1.15
5,428.00	2.83	178.19	5,421.28	137.47	-17.91	100.08	0.80
5,459.00	2.91	183.23	5,452.24	135.92	-17.93	98.82	0.85
5,489.00	3.15	178.68	5,482.20	134.34	-17.96	97.53	1.13
5,521.00	3.33	174.24	5,514.15	132.53	-17.84	96.14	0.96
5,551.00	3.39	171.46	5,544.10	130.79	-17.62	94.87	0.58
5,582.00	3.13	163.18	5,575.05	129.07	-17.24	93.71	1.73
5,612.00	3.06	156.81	5,605.00	127.55	<b>-</b> 16.69	92.82	1.17
5,643.00	2.90	150.00	5,635.96	126.11	-15.97	92.08	1.25
5,674.00	2.70	144.54	5,666.93	124.84	-15.16	91.54	1.07
5,705.00	2.80	136.73	5,697.89	123.69	-14.21	91.18	1.25
5,737.00	2.65	122.90	5,729.85	122.72	-13.06	91.08	2.10
5,767.00	2.50	121.51	5,759.82	122.00	<b>-</b> 11.92	91.18	0.54
5,798.00	1.91	116.91	5,790.80	121.42	-10.88	91.32	1.99
5,828.00	1.87	116.31	5,820.78	120.97	-10.00	91.49	0.15
5,859.00	1.94	114.88	5,851.77	120.53	-9.07	91.68	0.27
5,889.00	1.96	116.72	5,881.75	120.08	-8.15	91.87	0.22
5,921.00	1.95	113.13	5,913.73	119.62	-7.16	92.08	0.38
5,951.00	2.03	120.90	5,943.71	119.15	-6.23	92.25	0.94
5,983.00	2.20	119.66	5,975.69	118.56	-5.21	92.38	0.55
6,014.00	2.52	124.63	6,006.67	117.87	-4.13	92.47	1.22
6,045.00	2.33	138.17	6,037.64	117.02	-3.15	92.36	1.94
6,075.00	1.91	154.70	6,067.62	116.11	-2.53	92.00	2.46
6,107.00	1.91	162.89	6,099.60	115.12	-2.15	91.43	0.85
6,137.00	2.22	158.71	6,129.58	114.10	-1.79	90.82	1.15
6,169.00	2.44	163.27	6,161.55	112.87	-1.37	90.08	0.90
6,199.00	2.05	165.39	6,191.53	111.74	-1.05	89.36	1.33
6,229.00	1.05	151.56	6,221.52	110.98	-0.78	88.90	3.54
6,261.00	0.70	107.34	6,253.52	110.66	-0.46	88.84	2.29
6,291.00	0.81	50.25	6,283.51	110.74	-0.12	89.11	2.43
6,322.00	0.85	43.22	6,314.51	111.05	0.21	89.55	0.35
6,352.00	0.77	44.68	6,344.51	111.36	0.50	89.97	0.28
6,384.00	. 0.81	43.50	6,376.50	111.67	0.81	90.41	0.13
6,415.00	0.96	34.72	6,407.50	112.05	1.11	90.88	0.65
6,446.00	0.75	36.25	6,438.50	112.42	1.37	91.34	0.68
6,476.00	0.43	19.55	6,468.50	112.69	1.53	91.65	1.20
6,507.00	0.09	42.68	6,499.50	112.81	1.58	91.78	1.13
6,538.00	0.19	43.04	6,530.50	112.87	1.64	91.86	0.32
6,569.00	0.07	300.10	6,561.50	112.92	1.65	91.91	0.70
6,599.00	0.12	149.27	6,591.50	112.90	1.65	91.89	0.61
6,630.00	0.13	177.19	6,622.50	112.84	1.67	91.85	0.20
6,660.00	0.22	97.95	6,652.50	112.79	1.73	91.86	0.78
6,691.00	0.29	190.69	6,683.49	112.71	1.78	91.81	1.20
6,721.00	0.33	142.55	6,713.49	112.57	1.81	91.72	0.85
6,752.00	0.37	164.36	6,744.49	112.40	1.90	91.63	0.45
6,783.00	0.37	164.98	6,775.49	112.21	1.95	91.51	0.01
6,815.00	0.48	162.11	6,807.49	111.98	2.02	91.37	0.35
6,847.00	0.69	174.48	6,839.49	111.66	2.08	91.15	0.76
6,877.00	0.68	169.55	6,869.49	111.30	2.13	90.89	0.20
6,907.00	0.93	165.26	6,899.49	110.89	2.22	90.61	0.86

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)
6,938.00	0.96	166.39	6,930.48	110.40	2.34	90.29	0.11
6,969.00	0.95	158.05	6,961.48	109.91	2.50	89.99	0.45
7,000.00	1.08	167.81	6,992.47	109.38	2.66	89.66	0.70
7,031.00	1.28	168.77	7,023.47	108.76	2.79	89.23	0.65
7,063.00	1.23	170.50	7,055.46	108.07	2.92	88.75	0.20
7,093.00	1.35	166.58	7,085.45	107.41	3.05	88.30	0.50
7,125.00	1.32	167.18	7,117.44	106.68	3.22	87.82	0.10
7,156.00	1.24	162.96	7,148.43	106.01	3.40	87.38	0.40
7,187.00	1.27	157.41	7,179.43	105.37	3.63	87.00	0.40
7,218.00	1.12	164.45	7,210.42	104.77	3.84	86.64	0.68
7,249.00	1.45	165.56	7,241.41	104.09	4.02	86.21	1.07
7,279.00	1.32	153.58	7,271.40	103.42	4.27	85.81	1.06
7,310.00	1.53	157.67	7,302.39	102.71	4.58	85.43	0.75
7,340.00	1.48	156.21	7,332.38	101.99	4.89	85.03	0.21
7,372.00	1.49	150.93	7,364.37	101.25	5.26	84.65	0.43
7,402.00	1.76	158.68	7,394.36	100.48	5.62	84.24	1.16
7,432.00	1.72	147.94	7,424.35	99.67	6.02	83.83	1.09
7,464.00	1.92	149.95	7,456.33	98.80	6.55	83.44	0.66
7,494.00	2.26	161.67	7,486.31	97.80	6.99	82.90	1.81
7,525.00	2.27	168.33	7,517.29	96.62	7.30	82.13	0.85
7,555.00	2.22	171.89	7,547.26	95.46	7.50	81.32	0.49
7,585.00	1.64	156.35	7,577.25	94.49	7.76	80.69	2.59
7,616.00	1.34	146.10	7,608.24	93.78	8.14	80.35	1.29
7,647.00	1.55	158.12	7,639.23	93.09	8.50	80.00	1.19
7,679.00	1.48	163.23	7,671.22	92.30	8.78	79.53	0.48
7,711.00	1.70	176.78	7,703.20	91.43	8.92	78.91	1.36
7,741.00	2.00	178.04	7,733.19	90.46	8.97	78.16	1.01
7,772.00	1.91	179.97	7,764.17	89.40	8.99	77.32	0.36
7,802.00	2.08	190.03	7,794.15	88.37	8.89	76.43	1.30
7,833.00	2.11	184.49	7,825.13	87.24	8.75	75.44	0.66
7,863.00	2.35	186.50	7,855.11	86.08	8.64	74.44	0.84
7,895.00	2.35	183.25	7,887.08	84.78	8.52	73.32	0.42
7,925.00	2.52	181.95	7,917.05	83.50	8.47	72.26	0.60
7,955.00	2.25	181.78	7,947.03	82.25	8.43	71.23	0.90
7,986.00	1.90	180.90	7,978.01	81.13	8.40	70.31	1.13
8,016.00	1.80	177.37	8,007.99	80.16	8.41	69.54	0.51
8,046.00	2.12	179.64	8,037.97	79.14	8.44	68.73	1.10
8,077.00	2.03	180.79	8,068.95	78.02	8.43	67.82	0.32
8,107.00	2.04	177.56	8,098.93	76.95	8.45	66.98	0.38
8,137.00	2.49	178.53	8,128.91	75.77	8.49	66.05	1.51
8,168.00	2.32	174.57	8,159.88	74.47	8.57	65.05	0.77
8,200.00	2.49	172.39	8,191.86	73.14	8.72	64.06	0.60
8,232.00	2.62	171.98	8,223.82	71.72	8.91	63.04	0.41
8,262.00	2.80	171.37	8,253.79	70.32	9.12	62.03	0.61
8,294.00	2.34	181.08	8,285.76	68.89	9.22	60.95	1.97
8,324.00	2.19	180.94	8,315.73	67.71	9.20	59.98	0.50
8,356.00	2.24	192.34	8,347.71	66.49	9.06	58.91	1.38
8,386.00	1.93	190.60	8,377.69	65.42	8.84	57.92	1.05
8,416.00	2.01	183.64	8,407.67	64.39	8.71	57.02	0.84
8,447.00	1.93	185.98	8,438.66	63.33	8.63	56.11	0.37

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W	Vertical Section (ft)	Dogleg Rate (°/100ft)	
					(ft)			
8,477.00	1.88	179.28	8,468.64	62.34	8.58	55.29	0.76	
8,509.00	1.83	179.39	8,500.62	61.30	8.59	54.46	0.16	
8,539.00	2.18	181.10	8,530.60	60.25	8.58	53.61	1.18	
8,570.00	2.29	176.07	8,561.58	59.05	8.62	52.66	0.73	
8,601.00	2.27	181.50	8,592.56	57.81	8.64	51.68	0.70	
8,632.00	2.31	181.85	8,623.53	56.58	8.61	50.66	0.14	
8,663.00	1.95	186.19	8,654.51	55.43	8.53	49.69	1.27	
8,695.00	1.95	187.44	8,686.49	54.35	8.40	48.74	0.13	
8,725.00	1.91	182.31	8,716.47	53.34	8.31	47.88	0.59	
8,757.00	1.90	183.17	8,748.46	52.28	8.26	47.00	0.09	
8,789.00	1.81	174.30	8,780.44	51.25	8.28	46.18	0.94	
8,819.00	1.92	179.45	8,810.42	50.27	8.34	45.42	0.67	
8,851.00	2.06	176.97	8,842.40	49.16	8.37	44.55	0.51	
8,882.00	2.17	176.15	8,873.38	48.02	8.44	43.67	0.37	
8,913.00	2.31	177.35	8,904.36	46.81	8.51	42.74	0.48	
8,943.00	2.16	173.58	8,934.34	45.64	8.60	41.85	0.70	
8,973.00	2.37	175.09	8,964.31	44.46	8.72	40.97	0.73	
9,004.00	2.26	175.33	8,995.29	43.22	8.82	40.03	0.36	
9,034.00	2.16	179.10	9,025.27	42.06	8.88	39.13	0.59	
9,065.00	1.85	186.01	9,056.25	40.98	8.83	38.24	1.27	
9,095.00	1.72	186.98	9,086.23	40.05	8.73	37.43	0.44	
9,125.00	1.67	188.55	9,116.22	39.17	8.61	36.65	0.23	
9,157.00	1.72	191.85	9,148.20	38.24	8.44	35.80	0.34	
9,187.00	1.81	191.33	9,178.19	37.34	8.26	34.96	0.30	
9,218.00	1.86	189.05	9,209.17	36.36	8.08	34.07	0.29	
9,248.00	1.94	186.64	9,239.16	35.37	7.95	33.20	0.38	
9,280.00	2.06	184.19	9,271.14	34.26	7.84	32.24	0.46	
9,310.00	2.17	182.07	9,301.12	33.16	7.78	31.31	0.45	
9,342.00	2.18	182.39	9,333.10	31.94	7.73	30.31	0.05	
9,372.00	2.11	185.18	9,363.07	30.82	7.66	29.36	0.42	
9,403.00	2.01	185.62	9,394.05	29.71	7.55	28.41	0.33	
9,434.00	1.97	184.68	9,425.04	28.64	7.46	27.49	0.17	
9,466.00	1.82	188.28	9,457.02	27.59	7.34	26.57	0.60	
9,498.00	1.88	189.19	9,489.00	26.57	7.18	25.65	0.21	
9,528.00	1.84	193.02	9,518.99	25.61	7.00	24.77	0.44	
9,558.00	1.96	193.30	9,548.97	24.65	6.77	23.86	0.40	
9,590.00	2.10	199.39	9,580.95	23.56	6.45	22.80	0.80	
9,620.00	2.17	198.34	9,610.93	22.50	6.09	21.73	0.27	
9,651.00	2.17	193.53	9,641.91	21.37	5.77	20.63	0.59	
9,682.00	1.89	194.20	9,672.89	20.31	5.50	19.62	0.91	
9,713.00	1.96	192.35	9,703.87	19.30	5.26	18.66	0.30	
9,743.00	1.87	191.29	9,733.85	18.31	5.06	17.75	0.32	
9,774.00	1.85	189.89	9,764.84	17.33	4.87	16.84	0.16	
9,805.00	1.92	186.17	9,795.82	16.32	4.73	15.94	0.45	
9,836.00	1.72	182.30	9,826.80	15.33	4.66	15.11	0.76	
9,867.00	1.73	177.62	9,857.79	14.40	4.66	14.36	0.46	
9,898.00	1.56	171.32	9,888.78	13.52	4.74	13.70	0.80	
9,928.00	1.64	160.78	9,918.76	12.71	4.94	13.17	1.01	
9,960.00	1.56	156.17	9,950.75	11.88	5.27	12.69	0.47	
9,990.00	1.73	147.99	9,980.74	11.12	5.68	12.32	0.96	

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	
10,021.00	1.68	138.14	10,011.73	10.38	6.23	12.05	0.96	
10,052.00	1.85	132.32	10,042.71	9.71	6.90	11.91	0.80	
10,083.00	1.81	123.65	10,073.70	9.10	7.68	11.88	0.90	
10,113.00	2.03	121.02	10,103.68	8.57	8.53	11.95	0.79	
10,145.00	2.20	115.77	10,135.66	8.01	9.57	12.12	0.80	
10,168.00	2,53	116.00	10,158.64	7.59	10.42	12.29	1.44	
10,199.00	2.23	101.59	10,189.61	7.17	11.63	12.67	2.15	
10,230.00	2.84	101.15	10,220.58	6.90	12.97	13.25	1.97	
10,261.00	2.68	98.77	10,251.54	6.64	14.44	13.91	0.63	
10,291.00	1.72	128.13	10,281.52	6.26	15.49	14.22	4.84	
10,322.00	1.87	120.28	10,312.51	5.71	16.29	14.26	0.93	
10,353.00	0.92	154.89	10,343.50	5.23	16.83	14.20	3.97	
10,385.00	0.41	187.17	10,375.50	4.89	16.93	13.97	1.92	
10,416.00	0.98	168.08	10,406.49	4.52	16.97	13.70	1.96	
10,447.00	0.68	168.83	10,437.49	4.08	17.06	13.40	0.97	
10,508.00	1.11	145.65	10,498.48	3.24	17.46	12.96	0.91	
10,569.00	1.11	134.80	10,559.47	2.33	18.21	12.68	0.34	
10,599.00	1.29	137.71	10,589.47	1.88	18.65	12.57	0.63	
10,629.00	1.01	128.41	10,619.46	1.46	19.08	12.49	1.12	
10,690.00	0.15	71.69	10,680.46	1.15	19.58	12.54	1.53	
10,751.00	0.42	111.37	10,741.46	1.10	19.86	12.66	0.52	
10,813.00	0.33	150.35	10,803.45	0.86	20.16	12.65	0.43	
10,874.00	0.50	134.80	10,864.45	0.52	20.44	12.54	0.33	
10,936.00	0.91	70.85	10,926.45	0.49	21.10	12.90	1.33	
10,997.00	1.68	55.17	10,987.43	1.16	22.29	14.15	1.38	
11,028.00	1.38	64.32	11,018.42	1.58	23.00	14.91	1.25	
11,059.00	2.05	48.76	11,049.41	2.11	23.75	15.78	2.61	
11,090.00	1.59	60.61	11,080.39	2.68	24.54	16.71	1.91	
11,120.00	1.31	82.25	11,110.38	2.94	25.25	17.33	2.03	
11,152.00	2.07	61.31	11,142.37	3.26	26.11			
11,182.00	2.07	68.27				18.11	3.02	
			11,172.35	3.73	27.12	19.09	0.95	
11,213.00	2.43	67.47	11,203.32	4.21	28.28	20.15	0.78	
11,244.00	2.34	75.88	11,234.30	4.61	29.50	21.21	1.16	
11,275.00	2.01	74.93	11,265.27	4.91	30.64	22.12	1.07	
11,305.00	2.01	80.74	11,295.26	5.13	31.67	22.91	0.68	
11,337.00	1.59	82.11	11,327.24	5.28	32.66	23.62	1.32	
11,368.00	1.29	69.48	11,358.23	5.46	33.41	24.21	1.40	
11,398.00	1.65	60.59	11,388.22	5.79	34.11	24.89	1.42	
11,429.00	1.86	65.83	11,419.21	6.22	34.95	25.73	0.85	
11,459.00	1.68	61.20	11,449.19	6.63	35.78	26.55	0.77	
11,489.00	1.98	50.59	11,479.18	7.17	36.57	27.46	1.50	
11,520.00	1.98	64.40	11,510.16	7.74	37.47	28.45	1.54	
11,550.00	1.66	78.12	11,540.14	8.05	38.36	29.23	1.79	
11,581.00	1.36	68.41	11,571.13	8.28	39.14	29.88	1.27	
11,613.00	1.53	79.11	11,603.12	8.50	39.91	30.51	0.99	
11,643.00	1.57	79.40	11,633.11	8.65	40.71	31.11	0.14	
11,673.00	1.97	80.43	11,663.10	8.81	41.62	31.78	1.34	
11,705.00	1.97	82.13	11,695.08	8.98	42.71			
11,737.00	1.58	85.87	11,727.06	9.09	43.69	32.56 33.23	0.18 1.27	
11,769.00	1.50	78.07	11,759.05					
11,709.00	1.50	10.01	11,738.05	9.21	44.54	33.82	0.70	

## Design Report for Ron Lamb 31A-4-1 - Plan #1 - Gyrodata Gyro and Sperry MWD Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
11,800.00	0.88	87.55	11,790.04	9.30	45.18	34.28	2.09
11,819.00	0.16	83.93	11,809.04	9.31	45.35	34.39	3.79
11,831.00	0.39	246.43	11,821.04	9.30	45.33	34.36	4.54
11,847.00	1.05	251.79	11,837.04	9.23	45.14	34.20	4.14
11,863.00	1.88	248.64	11,853.04	9.09	44.76	33.85	5.21
11,895.00	1.38	260.22	11,885.02	8.83	43.89	33.13	1.86
11,927.00	2.14	278.77	11,917.01	8.86	42.92	32.58	2.94
11,959.00	2.43	272.49	11,948.98	8.98	41.65	31.92	1,20
11,989.00	2.55	268.48	11,978.95	8.99	40.35	31.16	0.70
12,022.00	2.37	272.90	12,011.92	9.00	38.93	30.33	0.79
12,054.00	2.41	273.42	12,043.90	9.07	37.60	29.60	0.14
12,086.00	2.13	275.26	12,075.87	9.17	36.34	28.93	0.90
12,118.00	1.73	271.17	12,107.85	9.23	35.26	28.34	1.32
12,150.00	1.87	267.22	12,139.84	9.22	34.26	27.73	0.58
12,182.00	1.99	282.15	12,171.82	9.31	33.19	27.18	1.61
12,214.00	2.31	279.31	12,203.80	9.53	32.01	26.66	1.05
12,246.00	2.37	281.55	12,235.77	9.77	30.73	26.08	0.34
12,277.00	1.80	293.36	12,266.75	10.09	29.65	25.71	2.29
12,309.00	2.55	286.08	12,298.73	10.49	28.51	25.35	2.49
12,341.00	2.50	283.18	12,330.69	10.84	27.14	24.82	0.43
12,373.00	2.46	289.58	12,362.66	11.23	25.82	24.35	0.87
12,405.00	3.01	284.26	12,394.63	11.67	24.36	23.84	1.89
12,437.00	2.73	282.44	12,426.59	12.04	22.80	23.21	0.92
12,469.00	2.88	284.79	12,458.55	12.41	21.28	22.61	0.59
12,488.00	3.06	284.19	12,477.52	12.66	20.32	22.24	0.96
12,520.00	2.98	284.62	12,509.48	13.07	18.69	21.61	0.26
12,551.00	3.00	286.89	12,540.44	13.51	17.13	21.04	0.39
12,583.00	2.98	285.93	12,572.39	13.99	15.53	20.47	0.17
12,604.00	2.97	285.51	12,593.37	14.28	14.48	20.09	0.11
Final Sperry	MWD Survey						
12,670.00	2.97	285.51	12,659.28	15.19	11.19	18.87	0.00

Survey Projection to TD of Sperry Directional Work

#### **Design Annotations**

Measured	Vertical	Local Coor	dinates	
Depth	Depth	+N/-S	+E/-W	Comment
(ft)	(ft)	(ft)	(ft)	
200.00	200.00	0,63	<b>-</b> 0.20	Surveys from 200.00ft to 2940.00ft are Gyrodata Gyro Surveys
2,940.00	2,938.99	59.75	1.90	Tie-On to Gyrodata Gyro Survey
3,025.00	3,023.85	63.96	-0.68	First Sperry MWD Survey
12,604.00	12,593.37	14.28	14.48	Final Sperry MWD Survey
12,670.00	12,659.28	15,19	11.19	Survey Projection to TD of Sperry Directional Work

#### **Vertical Section Information**

	gle		Origin	Orig	Start	
Ту	pe Target	Azimuth (°)	Type	+N/_S (ft)	+E/-W (ft)	TVD (ft)
TD	No Target (Freehand)	36.36	Slot	0.00	0.00	0.00

## Design Report for Ron Lamb 31A-4-1 - Plan #1 - Gyrodata Gyro and Sperry MWD Survey

#### Survey tool program

From (ft)

То

(ft)

Survey/Plan

Survey Tool

NS-GYRO-MS

200.00 2,940.00 Gyrodata Gyro Surveys 3,025.00 12,670.00 Sperry MWD Surveys

MWD

Project: Sanpete County, UT Site: Sec. 31-T15S-R3E Well: Ron Lamb 31A-4-1 Petro-Hunt, LLC **HALLIBURTON** Wellbore: Plan #1 160 140-LEGEND - Ron Lamb 31A-4-1, Plan #1, Plan #1 Proposal V0 - Gyrodata Gyro and Sperry MWD Survey 120 100-South(-)/North(+) (20 ft/in) First Sperry MWD Survey Survey Projection to TD of Sperry Directional Work Tie-On to Gyrodata Gyro Survey Final Sperry MWD Survey 20-

West(-)/East(+) (20 ft/in)

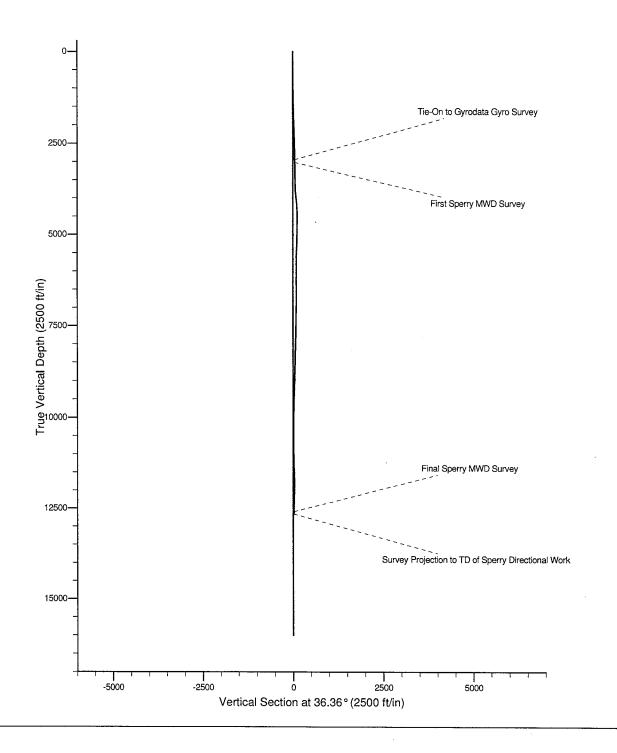
Project: Sanpete County, UT Site: Sec. 31-T15S-R3E Well: Ron Lamb 31A-4-1

# Petro-Hunt, LLC

**HALLIBURTON** 



- --- Ron Lamb 31A-4-1, Plan #1, Plan #1 Proposal V0
- Gyrodata Gyro and Sperry MWD Survey



# Petro-Hunt, LLC

Sanpete County, UT Sec. 31-T15S-R3E Ron Lamb 31A-4-1 Plan #1

**Design: Gyrodata Gyro and Sperry MWD Survey** 

# **Sperry Drilling Services**Standard Report

06 April, 2009

Well Coordinates: 6,976,041.82 N, 1,605,521.44 E (39° 28' 15.34" N, 111° 37' 25.01" W)

Ground Level: 5,543.40 ft

Local Coordinate Origin:

Centered on Well Ron Lamb 31A-4-1

RKB 28' @ 5571.40ft (Original Well Elev)

Viewing Datum: TVDs to System:

N

North Reference:

True

Unit System:

API - US Survey Feet

Geodetic Scale Factor Applied Version: 2003.14 Build: 57

JUL 2 6 2010

DIV. OF OIL, GAS & MINING

**HALLIBURTON** 

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Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.38	342.58	200.00	0.63	-0.20	0.39	0.00
					-0.20	0.59	0.19
400.00	0.67	3.33	rodata Gyro Sur 399.99	veys 2.43	-0.33	1.76	0.17
600.00	0.44	22.04	599.98	4.31	0.03	3.49	0.17
800.00	0.56	18.12	799.97	5.95	0.62	5.16	0.14
000.00	0.00	10.12	1 55.51	5.95	0.02	5.10	0.00
1,000.00	0.61	12.97	999.96	7.92	1.16	7.07	0.04
1,100.00	0.52	350.94	1,099.96	8.89	1.21	7.87	0.23
1,200.00	0.73	26.61	1,199.95	9.90	1.42	8.82	0.43
1,300.00	0.76	26.00	1,299.94	11.07	2.00	10.10	0.03
1,400.00	0.60	22.14	1,399.94	12.15	2.49	11.26	0.17
1,500.00	0.96	24.34	1,499.93	13.40	3.03	12.59	0.36
1,600.00	0.93	31.25	1,599.91	14.86	3.80	14.21	0.12
1,700.00	1.46	27.60	1,699.89	16.68	4.81	16.28	0.54
1,800.00	1.69	28.11	1,799.85	19.11	6.09	19.00	0.23
1,900.00	1.93	22.22	1,899.80	21.97	7.42	22.09	0.30
2,000.00	1.93	19.37	1,999.75	25.12	8.62	25.34	0.10
2,100.00	2,22	14.40	2,099.68	28.58	9.66	28.74	0.34
2,200.00	2.34	10.71	2,199.60	32.46	10.52	32.38	0.19
2,300.00	2.31	2.00	2,299.52	36.48	10.97	35.88	0.35
2,400.00	2.29	356.71	2,399.44	40.49	10.93	39.08	0.21
0.500.00	0.00	050.04	0.400.07	44.07	40.50		
2,500.00	2.08 1.90	350.21	2,499.37	44.27	10.50 9.59	41.88	0.32 0.44
2,600.00		338.71	2,599.31	47.61 50.73		44.02	
2,700.00	2.06	331.68	2,699.25	50.73	8.14	45.68 47.31	0.29
2,800.00 2,900.00	2.57 2.95	326.16 322.22	2,799.17 2,899.05	54.18 58.07	6.04 3.21	47.21 48.67	0.56 0.42
2,940.00	3.16	321.65	2,938.99	59.75	1.90	49.24	0.53
	rodata Gyro S 3.54		0.000.05	60.00	0.60	E4 40	0.00
3,025.00		334.54	3,023.85	63.96	-0.68	51.10	0.99
	MWD Survey	204.74	0.445.65	60.00	2.00	E0.00	4.00
3,117.00 3,210.00	4.07 4.73	321.71 324.53	3,115.65 3,208.37	69.09 74.80	-3.93 -8.20	53.30 55.37	1.09 0.75
3,302,00	5.27	324.53	3,200.37	74.60 81.51	-6.20 -12.57		
3,302.00	5,27	329.01	3,300.02	01.51	-12.57	58.18	0.72
3,334.00	5.33	327.14	3,331.89	84.02	-14.14	59.27	0.57
3,364.00	4.71	323.90	3,361.77	86.18	-15.62	60.14	2.27
3,394.00	4.85	329.52	3,391.67	88.27	-16.99	61.01	1.63
3,426.00	3.92	327.45	3,423.57	90.36	-18.26	61.93	2.95
3,457.00	3.29	334.02	3,454.51	92.05	-19.22	62.73	2.43
3,488.00	2.40	332.41	3,485.47	93.43	-19.91	63.43	2.88
3,520.00	2.15	330.14	3,517.45	94.54	-20.52	63.96	0.83
3,552.00	1.84	335.50	3,549.43	95.53	-21.03	64.45	1.13
3,583.00	0.88	327.27	3,580.42	96.18	-21.37	64.78	3.15
3,614.00	1.12	329.66	3,611.41	96.65	-21.65	64.99	0.79
3,644.00	1.58	321.74	3,641.41	97.22	-22.06	65.21	1.65
3,676.00	2.52	314.62	3,673.39	98.06	-22.83	65.43	3.04
3,706.00	3.13	318.50	3,703.35	99.14	-23.84	65.70	2.13
3,736.00	3.91	324.85	3,733.29	100.59	-24.97	66.19	2.90
3,768.00	4.35	327.58	3,765.21	102.51	-26.25	66.98	1.51
3,798.00	5.76	342.19	3,795.09	104.90	-27.32	68.27	6.33

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Measured Depth (ft)	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section (ft)	Dogleg Rate (°/100ft)
	(°)	(°)	(ft)	(ft)	(ft)	7 7	
3,827.00	7.13	347.80	3,823.91	108.05	-28.15	70.31	5.19
3,857.00	8.40	352.06	3,853.63	112.04	-28.84	73.12	4.64
3,888.00	8.53	355.20	3,884.30	116.57	-29.35	76.47	1.55
3,918.00	8.28	355.87	3,913.97	120.94	-29.69	79.78	0.89
3,950.00	7.81	356.59	3,945.66	125.41	-29.99	83.21	1.50
3,980.00	7.56	357.45	3,975.39	129.42	-30.20	86.31	0.92
4,011.00	7.26	358.57	4,006.13	133.41	-30.34	89.44	1.07
4,041.00	7.11	0.93	4,035.89	137.16	-30.35	92.45	1.10
4,072.00	6.38	0.31	4,066.68	140.80	-30.31	95.41	2.37
4,103.00	5.93	2.89	4,097.50	144.12	-30.22	98.14	1.70
4,129.00	5.41	3.02	4,123.37	146.69	-30.09	100.28	2.00
4,161.00	4.87	9.63	4,155.25	149.54	-29.78	102.76	2.50
4,191.00	4.22	19.29	4,185.15	151.83	-29.21	104.95	3.34
4,223.00	3.66	31.13	4,217.08	153.82	-28.29	107.09	3.08
4,255.00	3.45	45.03	4,249.02	155.37	-27.08	109.06	2.76
4,290.00	3.64	63.87	4,283.95	156.61	-25.34	111.09	3,36
4,320.00	3.88	81.02	4,313.89	157.18	-23.48	112.65	3.82
4,351.00	4.05	89.01	4,344.81	157.37	-21.35	114.06	1.86
4,382.00	3.70	91.57	4,375.74	157.36	-19.25	115.30	1.26
4,413.00	2.20	97.59	4,406.70	157.25	-17.66	116.16	4.93
4,426.00	1.45	87.49	4,419.69	157.23	-17.25	116.38	6.26
4,507.00	0.34	313.85	4,500.68	157.44	-16.40	117.05	2.10
4,537.00	0.49	298.70	4,530.68	157.56	-16.58	117.05	0.62
4,567.00	0.75	306.18	4,560.68	157.74	-16.85	117.03	0.91
4,599.00	0.75	291.93	4,592.68	157.94	-17.21	116.98	0.58
4,629.00	0.77	249.59	4,622.68	157.94	-17.58	116.76	1.83
4,660.00	1.14	222.90	4,653.67	157.65	-17.99	116.28	1.84
4,690.00	1.59	227.48	4,683.66	157.15	-18.50	115.57	1.54
4,721.00	1.49	217.32	4,714.65	156.53	-19.06	114.75	0.94
4,752.00	1.28	222.56	4,745.64	155.96	-19.54	114.00	0.79
4,783.00	0.58	194.50	4,776.64	155.55	-19.81	113.51	2.63
4,814.00	0.53	164.43	4,807.64	155.26	-19.81	113.28	0.94
4,845.00	0.44	155.88	4,838.64	155.02	-19.73	113.13	0.37
4,876.00	0.73	126.28	4,869.64	154.79	-19.52	113.07	1.32
4,908.00	0.68	132.66	4,901.63	154.54	-19.21	113.05	0.29
4,939.00	0.76	145.75	4,932.63	154.25	-18.96	112.96	0.59
4,971.00	0.65	155.66	4,964.63	153.91	-18.77	112.81	0.51
5,001.00	0.81	152.76	4,994.63	153.56	-18.60	112.63	0.55
5,032.00	0.64	173.14	5,025.62	153.19	-18.48	112.40	0.99
5,062.00	0.90	180.40	5,055.62	152.79	-18.46	112.09	0.92
5,093.00	1.23	172.38	5,086.62	152.22	-18.42	111.65	1.17
5,123.00	1.92	170.55	5,116.60	151.40	-18.29	111.07	2.31
5,154.00	2.23	176.56	5,147.58	150.29	-18.17	110.25	1.22
5,184.00	2.48	174.28	5,177 <i>.</i> 56	149.06	-18.07	109.32	0.89
5,214.00	2.53	175.99	5,207.53	147.76	-17.96	108.33	0.30
5,245.00	2.71	179.39	5,238.50	146.34	-17.91	107.22	0.77
5,275.00	2.69	175.38	5,268.46	144.93	-17.84	106.13	0.63
5,306.00	2.81	180.78	5,299.43	143.44	-17.79	104.96	0.92
5,336.00	2.92	184.67	5,329.39	141.95	-17.87	103.71	0.74
5,368.00	2.90	181.50	5,361.35	140.33	-17.95	102.35	0.51

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	
5,398.00	2.59	178.36	5,391.32	138.89	-17.95	101.20	1.15	
5,428.00	2.83	178.19	5,421.28	137.47	-17.91	100.08	0.80	
5,459.00	2.03	183.23	5,452.24	135.92	-17.93	98.82	0.85	
5,489.00	3.15	178.68	5,482.20	134.34	-17.96	97.53	1.13	
5,521.00	3.33	174.24	5,514.15	132.53	-17.84	96.14	0.96	
5,551.00	3.39	171.46	5,544.10	130.79	-17.62	94.87	0.58	
5,582.00	3.13	163.18	5,575.05	129.07	-17.24	93.71	1.73	
5,612.00	3.06	156.81	5,605.00	127.55	-16.69	92.82	1.17	
5,643.00	2.90	150.00	5,635.96	126.11	-15.97	92.08	1.25	
5,674.00	2.70	144.54	5,666.93	124.84	-15.16	91.54	1.07	
5,705.00	2.80	136.73	5,697.89	123.69	-14.21	91.18	1.25	
5,737.00	2.65	122.90	5,729.85	122.72	-13.06	91.08	2.10	
5,767.00	2.50	121.51	5,759.82	122.00	-11.92	91,18	0.54	
5,798.00	1.91	116.91	5,790.80	121.42	-10.88	91.32	1.99	
5,828.00	1.87	116.31	5,820.78	120.97	-10.00	91.49	0.15	
5,859.00	1.94	114.88	5,851.77	120.53	-9.07	91.68	0.27	
5,889.00	1.96	116.72	5,881.75	120.08	-8.15	91.87	0.22	
5,921.00	1.95	113.13	5,913.73	119.62	-7.16	92.08	0.38	
5,951.00	2.03	120.90	5,943.71	119.15	-6.23	92.25	0.94	
5,983.00	2.20	119.66	5,975.69	118.56	-5.21	92.38	0.55	
6,014.00	2.52	124.63	6,006.67	117.87	-4.13	92.47	1.22	
6,045.00	2.33	138.17	6,037.64	117.02	-3.15	92.36	1.94	
6,075.00	1.91	154.70	6,067.62	116.11	-3.13 -2.53	92.00	2.46	
6,107.00	1.91	162.89	6,099.60	115.12	-2.55 -2.15	91.43	0.85	
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6,137.00	2.22	158.71	6,129.58	114.10	-1.79	90.82	1.15	
6,169.00	2.44	163.27	6,161.55	112.87	-1.37	90.08	0.90	
6,199.00	2.05	165.39	6,191.53	111.74	-1.05	89.36	1.33	
6,229.00	1.05	151.56	6,221.52	110.98	-0.78	88.90	3.54	
6,261.00	0.70	107.34	6,253.52	110.66	-0.46	88.84	2.29	
6,291.00	0.81	50.25	6,283.51	110.74	-0.12	89.11	2.43	
6,322.00	0.85	43.22	6,314.51	111.05	0.21	89.55	0.35	
6,352.00	0.77	44.68	6,344.51	111.36	0.50	89.97	0.28	
6,384.00	0.81	43.50	6,376.50	111.67	0.81	90.41	0.13	
6,415.00	0.96	34.72	6,407.50	112.05	1.11	90.88	0.65	
6,446.00	0.75	36.25	6,438.50	112.42	1.37	91.34	0.68	
6,476.00	0.43	19.55	6,468.50	112.69	1.53	91.65	1.20	
6,507.00	0.09	42.68	6,499.50	112.81	1.58	91.78	1.13	
6,538.00	0.19	43.04	6,530.50	112.87	1.64	91.86	0.32	
6,569.00	0.07	300.10	6,561.50	112.92	1.65	91.91	0.70	
6,599.00	0.12	149.27	6,591.50	112.90	1.65	91.89	0.61	
6,630.00	0.13	177.19	6,622.50	112.84	1.67	91.85	0.20	
6,660.00	0.22	97.95	6,652.50	112.79	1.73	91.86	0.78	
6,691.00	0.29	190.69	6,683.49	112.71	1.78	91.81	1.20	
6,721.00	0.33	142.55	6,713.49	112.57	1.81	91.72	0.85	
6,752.00	0.37	164.36	6,744.49	112.40	1.90	91.63	0.45	
6,783.00	0.37	164.98	6,775.49	112.21	1.95	91.51	0.01	
6,815.00	0.48	162.11	6,807.49	111.98	2.02	91.37	0.35	
6,847.00	0.69	174.48	6,839.49	111.66	2.08	91.15	0.76	
6,877.00	0.68	169.55	6,869.49	111.30	2.13	90.89	0.20	
6,907.00	0.93	165.26	6,899.49	110.89	2.22	90.61	0.86	
0,307.00	0.83	100.20	U,U00.40	110.09	4.44	1 0.08	0.00	

Sanpete County, UT

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	
6,938.00		166.39	6,930.48	110.40	2.34	90.29	0.11	
6,969.00		158.05	6,961.48	109.91	2.50	89.99	0.45	
7,000.00		167.81	6,992.47	109.38	2.66	89.66	0.70	
7,000.00		168.77						
7,031.00	1.28	108.77	7,023.47	108.76	2.79	89.23	0.65	
7,063.00	1.23	170.50	7,055.46	108.07	2.92	88.75	0.20	
7,093.00	1.35	166.58	7,085.45	107.41	3.05	88.30	0.50	
7,125.00	1.32	167.18	7,117.44	106.68	3.22	87.82	0.10	
7,156.00	1.24	162.96	7,148.43	106.01	3.40	87.38	0.40	
7,187.00	1.27	157.41	7,179.43	105.37	3.63	87.00	0.40	
7,218.00	1.12	164.45	7,210.42	104.77	3.84	86.64	0.68	
7,249.00	1.45	165.56	7,241.41	104.09	4.02	86.21	1.07	
7,279.00		153.58	7,271.40	103.42	4.27	85.81	1.06	
7,310.00	1.53	157.67	7,302.39	102.71	4.58	85.43	0.75	
7,340.00		156.21	7,332.38	101.99	4.89	85.03	0.21	
7,372.00		150.93	7,364.37	101.25	5.26	84.65	0.43	
7,402.00		158.68	7,394.36	100.48	5.62	84.24	1.16	
7,432.00	1.72	147.94	7,424.35	99.67	6.02	83.83	1.09	
7,464.00	1.92	149.95	7,456.33	98.80	6.55	83.44	0.66	
7,494.00	2.26	161.67	7,486.31	97.80	6.99	82.90	1.81	
7,525.00	2.27	168.33	7,517.29	96.62	7.30	82.13	0.85	
7,555.00	2.22	171.89	7,547.26	95.46	7.50	81.32	0.49	
7,585.00	1.64	156.35	7,577.25	94.49	7.76	80.69	2.59	
7,616.00	1.34	146.10	7,608.24	93.78	8.14	80.35	1.29	
7,647.00	1.55	158.12	7,639.23	93.09	8.50	80.00	1.19	
7,679.00	1.48	163.23	7,671.22	92.30	8.78	79.53	0.48	
7,711.00	1.70	176.78	7,703.20	91.43	8.92	78.91	1.36	
7,741.00	2.00	178.04	7,733.19	90.46	8.97	78.16	1.01	
7,772.00	1.91	179.97	7,764.17	89.40	8.99	77.32	0.36	
7,802.00	2.08	190.03	7,794.15	88.37	8.89	76.43	1.30	
7,833.00	2.11	184.49	7,825.13	87.24	8.75	75.44	0.66	
7,863.00	2.35	186.50	7,855.11	86.08	8.64	74.44	0.84	
7,895.00	2.35	183.25	7,887.08	84.78	8.52	73.32	0.42	
7,925.00	2.52	181.95	7,917.05	83.50	8.47	72.26	0.60	
7,955.00	2.25	181.78	7,947.03	82.25	8.43	71.23	0.90	
7,986.00	1.90	180.90	7,978.01	81.13	8.40	70.31	1.13	
8,016.00		177.37	8,007.99	80.16	8.41	69.54	0.51	
8,046.00		179.64	8,037.97	79.14	8.44	68.73	1.10	
8,077.00		180.79	8,068.95	78.02	8.43	67.82	0.32	
8,107.00	2.04	177.56	8,098.93	76.95	8.45	66.98	0.38	
8,137.00		178.53	8,128.91	75.77	8.49	66.05	1.51	
8,168.00	2.32	174.57	8,159.88	74.47	8.57	65.05	0.77	
8,200.00		172.39	8,191.86	73.14	8.72	64.06	0.60	
8,232.00	2.62	171.98	8,223.82	71.72	8.91	63.04	0.41	
8,262.00		171.37	8,253.79	70.32	9.12	62.03	0.61	
8,294.00	2.34	181.08	8,285.76	68.89	9.22	60.95	1.97	
8,324.00		180.94	8,315.73	67.71	9.20	59.98	0.50	
8,356.00		192.34	8,347.71	66.49	9.06	58.91	1.38	
8,386.00		190.60	8,377.69	65.42	8.84	57.92	1.05	
8,416.00	2.01	183.64	8,407.67	64.39	8.71	57.02	0.84	
8,447.00	1.93	185,98	8,438.66	63.33	8.63	56.11	0.37	

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Sanpete County, UT

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	
8,477.00	1.88	179.28	8,468.64	62.34	8.58	55.29	0.76	
8,509.00	1.83	179.39	8,500.62	61.30	8.59	54.46	0.16	
8,539.00	2.18	181.10	8,530.60	60.25	8.58	53.61	1.18	
8,570.00	2.29	176.07	8,561.58	59.05	8.62	52.66	0.73	
8,601.00	2.27	181.50	8,592.56	57.81	8.64	51.68	0.70	
8,632.00	2.31	181.85	8,623.53	56.58	8.61	50.66	0.14	
8,663.00	1.95	186.19	8,654.51	55.43	8.53	49.69	1.27	
8,695.00	1.95	187.44	8,686.49	54.35	8.40	48.74	0.13	
8,725.00	1.91	182.31	8,716.47	53.34	8.31	47.88	0.59	
8,757.00	1.90	183.17	8,748.46	52.28	8.26	47.00	0.09	
8,789.00	1.81	174.30	8,780.44	51.25	8.28	46.18	0.94	
8,819.00	1.92	179.45	8,810.42	50.27	8.34	45.42	0.67	
8,851.00	2.06	176.97	8,842.40	49.16	8.37	44.55	0.51	
8,882.00 8,913.00	2.17	176.15	8,873.38	48.02	8.44	43.67	0.37	
•	2.31	177.35	8,904.36	46.81	8.51	42.74	0.48	
8,943.00	2.16	173.58	8,934.34	45.64	8.60	41.85	0.70	
8,973.00	2.37	175.09	8,964.31	44.46	8.72	40.97	0.73	
9,004.00	2.26	175.33	8,995.29	43.22	8.82	40.03	0.36	
9,034.00	2.16	179.10	9,025.27 9.056.25	42.06	8.88	39.13	0.59	
9,065.00	1.85 1.72	186.01	* * * *	40.98	8.83 8.73	38.24 37.43	1.27 0.44	
9,095.00	1.72	186.98	9,086.23	40.05			0.23	
9,125.00	1.72	188.55	9,116.22	39.17	8.61	36.65	0.23	
9,157.00		191.85	9,148.20	38.24	8.44	35.80		
9,187.00	1.81	191.33	9,178.19	37.34	8.26	34.96	0.30	
9,218.00	1.86	189.05	9,209.17	36.36	8.08	34.07	0.29	
9,248.00	1.94	186.64	9,239.16	35.37	7.95	33.20	0.38	
9,280.00	2.06	184.19	9,271.14	34.26	7.84	32.24	0.46	
9,310.00	2.17	182.07	9,301.12	33.16	7.78	31.31	0.45	
9,342.00 9,372.00	2.18 2.11	182.39 185.18	9,333.10 9,363.07	31.94 30.82	7.73 7.66	30.31 29.36	0.05 0.42	
9,403.00	2.11	185.62	9,303.07	29.71	7.55	28.41	0.42	
9,434.00	1.97	184.68	9,394.05	28.64	7.46	27.49	0.33	
9,466.00	1.82	188.28	9,425.04	27.59	7.46	26.57	0.60	
9,498.00	1.88	189.19	9,489.00	26.57	7.18	25.65	0.21	
9,528.00	1.84	193.02	9,518.99	25.61	7.00	24.77	0.44	
9,558.00	1.96	193.30	9,548.97	24.65	6.77	23.86	0.40	
9,590.00	2.10	199.39	9,580.95	23.56	6.45	22.80	0.80	
9,620.00	2.17	198.34	9,610.93	22.50	6.09	21.73	0.27	
9,651.00	2.17	193.53	9,641.91	21.37	5.77	20.63	0.59	
9,682.00	1.89	194.20	9,672.89	20.31	5.50	19.62	0.91	
9,713.00	1.96	192.35	9,703.87	19.30	5.26	18.66	0.30	
9,743.00	1.87	191.29	9,733.85	18.31	5.06	17.75	0.32	
9,774.00	1.85	189.89	9,764.84	17.33	4.87	16.84	0.16	
9,805.00	1.92	186.17	9,795.82	16.32	4.73	15.94	0.45	
9,836.00	1.72	182.30	9,826.80	15.33	4.66	15.11	0.76	
9,867.00	1.73	177.62	9,857.79	14.40	4.66	14.36	0.46	
9,898.00	1.56	171.32	9,888.78	13.52	4.74	13.70	0.80	
9,928.00	1.64	160.78	9,918.76	12.71	4.94	13.17	1.01	
9,960.00	1.56	156.17	9,950.75	11.88	5.27	12.69	0.47	
9,990.00	1.73	147.99	9,980.74	11.12	5.68	12.32	0.96	

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	
10,021.00	1.68	138.14	10,011.73	10.38	6.23	12.05	0.96	
10,052.00	1.85	132.32	10,042.71	9.71	6.90	11.91	0.80	
10,083.00	1.81	123.65	10,073.70	9.10	7.68	11.88	0.90	
10,113.00	2.03	121.02	10,103.68	8.57	8.53	11.95	0.79	
			•		0.55	11.95		
10,145.00	2.20	115.77	10,135.66	8.01	9.57	12.12	0.80	
10,168.00	2.53	116.00	10,158.64	7.59	10.42	12.29	1.44	
10,199.00	2.23	101.59	10,189.61	7.17	11.63	12.67	2.15	
10,230.00	2.84	101.15	10,220.58	6.90	12.97	13.25	1.97	
10,261.00	2.68	98.77	10,251.54	6.64	14.44	13.91	0.63	
10,291.00	1.72	128.13	10,281.52	6.26	15.49	14.22	4.84	
10,322.00	1.87	120.28	10,312.51	5.71	16.29	14.26	0.93	
10,353.00	0.92	154.89	10,343.50	5.23	16.83	14.20	3.97	
10,385.00	0.41	187.17	10,375.50	4.89	16.93	13.97	1.92	
10,416.00	0.98	168.08	10,406.49	4.52	16.97	13.70	1.96	
10,447.00	0.68	168.83	10,437.49	4.08	17.06	13.40	0.97	
10,508.00	1.11	145.65	10,498.48	3.24	17.46	12.96	0.91	
10,569.00	1.11	134.80	10,559.47	2.33	18.21	12.68	0.34	
10,599.00	1.29	137.71	10,589.47	1.88	18.65	12.57	0.63	
10,629.00	1.01	128.41	10,619.46	1.46	19.08	12.49	1.12	
10,690.00	0.15	71.69	10,680.46	1.15	19.58	12.54	1.53	
10,751.00	0.42	111.37	10,741.46	1.10	19.86	12.66	0.52	
10,813.00	0.33	150.35	10,803.45	0.86	20.16	12.65	0.43	
10,874.00	0.50	134.80	10,864.45	0.52	20.44	12.54	0.33	
10,936.00	0.91	70.85	10,926.45	0.49	21.10	12.90	1.33	
10,997.00	1.68	55.17	10,987.43	1.16	22.29	14.15	1.38	
11,028.00	1.38	64.32	11,018.42	1.58	23.00	14.91	1.25	
11,059.00	2.05	48.76	11,049.41	2.11	23.75	15.78	2.61	
11,090.00	1.59	60.61	11,080.39	2.68	24.54	16.71	1.91	
11,120.00	1.31	82.25	11,110.38	2.94	25.25	17.33	2.03	
11,152.00	2.07	61.31	11,142.37	3.26	26.11	18.11	3.02	
11,182.00	2.19	68.27	11,172.35	3.73	27.12	19.09	0.95	
11,213.00	2.43	67.47	11,203.32	4.21	28.28	20.15	0.78	
11,244.00	2.34	75.88	11,234.30	4.61	29.50	21.21	1.16	
11,275.00	2.01	74.93	11,265.27	4.91	30.64	22.12	1.07	
11,305.00	2.01	80.74	11,295.26	5.13	31.67	22.91	0.68	
11,337.00	1.59	82.11	11,327.24	5.28	32.66	23.62	1.32	
11,368.00	1.29	69.48	11,358.23	5.46	33.41	24.21	1.40	
11,398.00	1.65	60.59	11,388.22	5.79	34.11	24.89	1.42	
11,429.00	1.86	65.83	11,419.21	6.22	34.95	25.73	0.85	
11,459.00	1.68	61.20	11,449.19	6.63	35.78	26.55	0.77	
11,489.00	1.98	50.59	11,479.18	7.17	36.57	27.46	1.50	
11,520.00	1.98	64.40	11,510.16	7.74	37.47	28.45	1.54	
11,550.00	1.66	78.12	11,540.14	8.05	38.36	29.23	1.79	
11,581.00	1.36	68.41	11,571.13	8.28	39.14	29.88	1.27	
11,613.00	1.53	79.11	11,603.12	8.50	39.91	30.51	0.99	
11,643.00	1.57	79.40	11,633.11	8.65	40.71	31.11	0.14	
11,673.00	1.97	80.43	11,663.10	8.81	41.62	31.78	1.34	
11,705.00	1.97	82.13	11,695.08	8.98	42.71	32.56	0.18	
11,737.00	1.58	85.87	11,727.06	9.09	43.69	33.23	1.27	
11,769.00	1.50	78.07	11,759.05	9.21	44.54	33.82	0.70	

#### Design Report for Ron Lamb 31A-4-1 - Plan #1 - Gyrodata Gyro and Sperry MWD Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
11,800.00	0.88	87.55	11,790.04	9.30	45.18	34.28	2.09
11,819.00	0.16	83.93	11,809.04	9.31	45.35	34.39	3.79
11,831.00	0.39	246.43	11,821.04	9.30	45,33	34.36	4.54
11,847.00	1.05	251.79	11,837.04	9.23	45.14	34.20	4.14
11,863.00	1.88	248.64	11,853.04	9.09	44.76	33.85	5.21
11,895.00	1.38	260.22	11,885.02	8.83	43.89	33.13	1.86
11,927.00	2.14	278.77	11,917.01	8.86	42.92	32.58	2.94
11,959.00	2.43	272.49	11,948.98	8.98	41.65	31.92	1.20
11,989.00	2.55	268.48	11,978.95	8.99	40.35	31.16	0.70
12,022.00	2.37	272.90	12,011.92	9.00	38.93	30.33	0.79
12,054.00	2.41	273.42	12,043.90	9.07	37.60	29.60	0.14
12,086.00	2.13	275.26	12,075.87	9.17	36.34	28.93	0.90
12,118.00	1.73	271.17	12,107.85	9.23	35.26	28.34	1.32
12,150.00	1.87	267.22	12,139.84	9.22	34.26	27.73	0.58
12,182.00	1.99	282.15	12,171.82	9.31	33.19	27.18	1.61
12,214.00	2.31	279.31	12,203.80	9.53	32.01	26.66	1.05
12,246.00	2.37	281.55	12,235.77	9.77	30.73	26.08	0.34
12,277.00	1.80	293.36	12,266.75	10.09	29.65	25.71	2.29
12,309.00	2.55	286.08	12,298.73	10.49	28.51	25.35	2.49
12,341.00	2.50	283.18	12,330.69	10.84	27.14	24.82	0.43
12,373.00	2.46	289.58	12,362.66	11.23	25.82	24.35	0.87
12,405.00	3.01	284.26	12,394.63	11.67	24.36	23.84	1.89
12,437.00	2.73	282.44	12,426.59	12.04	22.80	23.21	0.92
12,469.00	2.88	284.79	12,458.55	12.41	21.28	22.61	0.59
12,488.00	3.06	284.19	12,477.52	12.66	20.32	22.24	0.96
12,520.00	2.98	284.62	12,509.48	13.07	18.69	21.61	0.26
12,551.00	3.00	286.89	12,540.44	13.51	17.13	21.04	0.39
12,583.00	2.98	285.93	12,572.39	13.99	15.53	20.47	0.17
12,604.00	2.97	285.51	12,593.37	14.28	14.48	20.09	0.11
Final Sperry	MWD Survey						
12,670.00	2.97	285.51	12,659.28	15.19	11.19	18.87	0.00

Survey Projection to TD of Sperry Directional Work

#### **Design Annotations**

Measured	Vertical	Local Coor	dinates	
Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
200.00	200.00	0.63	-0.20	Surveys from 200.00ft to 2940.00ft are Gyrodata Gyro Surveys
2,940.00	2,938.99	59.75	1.90	Tie-On to Gyrodata Gyro Survey
3,025.00	3,023.85	63.96	-0.68	First Sperry MWD Survey
12,604.00	12,593.37	14.28	14.48	Final Sperry MWD Survey
12,670.00	12,659.28	15.19	11.19	Survey Projection to TD of Sperry Directional Work

#### **Vertical Section Information**

	Angle			Origin	Origin		Start	
	Туре	Target	Azimuth (°)	Туре	+N/_S (ft)	+E/-W (ft)	TVD (ft)	
TD	•	No Target (Freehand)	36,36	Slot	0.00	0.00	0.00	

Petro-Hunt, LLC

#### **HALLIBURTON**

Sanpete County, UT

#### Design Report for Ron Lamb 31A-4-1 - Plan #1 - Gyrodata Gyro and Sperry MWD Survey

#### Survey tool program

 From (ft)
 To (ft)
 Survey/Plan
 Survey Tool

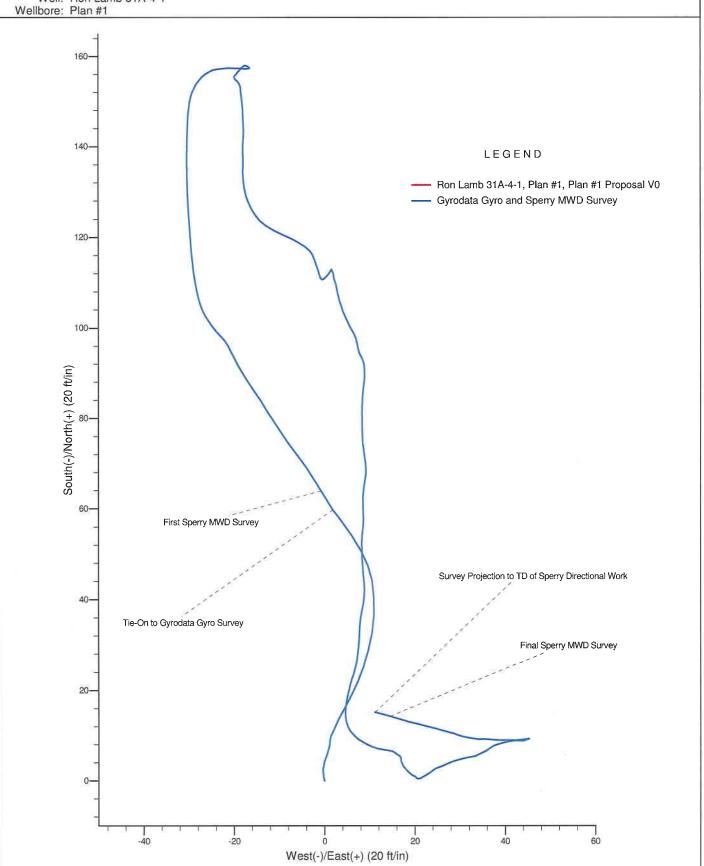
 200.00
 2,940.00
 Gyrodata Gyro Surveys
 NS-GYRO-MS

 3,025.00
 12,670.00
 Sperry MWD Surveys
 MWD

Project: Sanpete County, UT Site: Sec. 31-T15S-R3E Well: Ron Lamb 31A-4-1

# Petro-Hunt, LLC

HALLIBURTON



Project: Sanpete County, UT Site: Sec. 31-T15S-R3E Well: Ron Lamb 31A-4-1

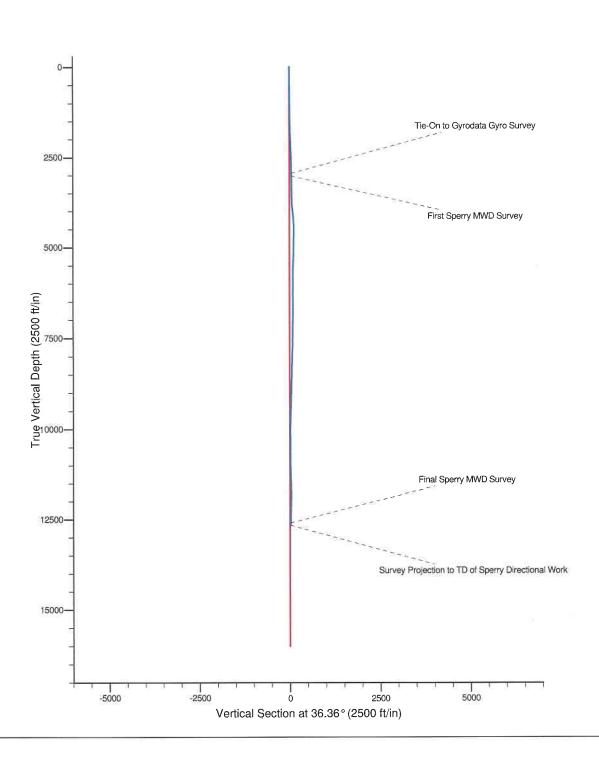
# Petro-Hunt, LLC

HALLIBURTON



--- Ron Lamb 31A-4-1, Plan #1, Plan #1 Proposal V0

Gyrodata Gyro and Sperry MWD Survey





## **SURVEY REPORT**

Petro Hunt, LLC. Ron Lamb #31A-4-1 Unit #109 Sanpete County, Utah RM1208GW957

**December 31, 2008** 



**Gyrodata Incorporated** 301 Thelma Dr. #433 Casper, Wyoming 82609

307/234-7241 Fax: 307/234-6309

## **SURVEY REPORT**

Petro Hunt, LLC.
Ron Lamb #31A-4-1
Unit #109
Sanpete County, Utah
RM1208GW957

**December 31, 2008** 

RECEIVED
JUL 2 6 2010

DIV. OF OIL, GAS & MINING



**Gyrodata Incorporated** 

301 Thelma Dr. #433 Casper, Wyoming 82609

307/234-7241 Fax: 307/234-6309

December 31, 2008

Petro Hunt, LLC. 258 119<sup>th</sup> Ave. SW Killdeer, ND 85640

Re:

Ron Lamb #31A-4-1 Sanpete County, Utah

Enclosed, please find one (1) original and one (1) disk of the completed survey for the above referenced well.

We would like to take this opportunity to thank you for using Gyrodata, and we look forward to serving you in the future.

Sincerely,

Joel Sulzen

**Operations Manager** 

JS:mg

#### A Gyrodata Directional Survey

for

#### PETRO HUNT, LLC.

Lease: Ron Lamb Well: 31A-4-1, 4" Drillpipe

Location: Unit #109, Sanpete County, Utah

Job Number: RM1208GW957

Run Date: 12/30/2008 8:28:37 AM

Surveyor: Matt Le Bas

Calculation Method: MINIMUM CURVATURE

Survey Latitude: 39.470900 deg. N Longitude: 111.623050 deg. W

Azimuth Correction:

Gyro: Bearings are Relative to True North

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location

#### A Gyrodata Directional Survey

Petro Hunt, LLC.

Lease: Ron Lamb Well: 31A-4-1, 4" Drillpipe Location: Unit #109, Sanpete County, Utah Job Number: RM1208GW957

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.		E HC ARIN 3. mir	G	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOS DIST. Az feet	ZIMUTH	HORIZO COORDIN feet	NATES
0.00	0.00	0.00	N (	) 0	E	0.00	0.00	0.0	0.0	0.00 N	0.00 E
	ED DEPTHS	AND COORD				I INSIDE 3-1/2" DR ED TO UNIT #109					
200.00	0.38	342.58	N 17	25	W	0.19	200.00	0.7	342.6	0.64 N	0.20 W
400.00	0.67	3.33	N = 3	20	E	0.17	399.99	2.5	352.3	2.45 N	0.33 W
600.00	0.44	22.04	N 22		E	0.15	599.98	4.3	0.3	4.33 N	0.02 E
800.00	0.56	18.12	N 18			0.06	799.97	6.0	5.9	5.96 N	0.61 E
1000.00	0.61	12.97	N 12	58	E	0.04	999.96	8.0	8.3	7.92 N	1.15 E
1100.00	0.52	350.94	N 9	) 4	W	0.24	1099.96	9.0	7.7	8.89 N	1.20 E
1200.00	0.73	26.61	N 26	37	Ε	0.43	1199.95	10.0	8.1	9.91 N	1.42 E
1300.00	0.76	26.00	N 26		Ē	0.03	1299.94	11.3	10.2	11.08 N	1.99 E
1400.00	0.60	22.14	N 22		E	0.17	1399.94	12.4	11.5	12.16 N	2.48 E
1500.00	0.96	24.34	N 24			0.36	1499.93	13.7	12.7	13.41 N	3.02 E
1600.00	0.93	31.25	N 31	15	Е	0.12	1599.91	15.2	142	14.06.31	2.70 E
1700.00	1.46	27.60	N 27			0.12	1699.89	15.3	14.3	14.86 N	3.79 E
1800.00	1.69	28.11	N 28			0.34	1799.85	17.4	16.0	16.68 N	4.80 E
1900.00	1.93	22.22	N 20			0.23		20.0 23.2	17.7	19.10 N	6.08 E
2000.00	1.93	19.37	N 19				1899.80		18.6	21.96 N	7.41 E
2000.00	1.93	19.57	N 19	24	Е	0.10	1999.75	26.5	18.9	25.11 N	8.61 E
2100.00	2.22	14.40	N 14	24	E	0.34	2099.68	30.2	18.7	28.58 N	9.65 E
2200.00	2.34	10.71	N 10			0.19	2199.60	34.1	17.9	32.46 N	10.51 E
2300.00	2.31	2.00	N 2		$\tilde{ ext{E}}$	0.35	2299.52	38.1	16.7	36.48 N	10.96 E
2400.00	2.29	356.71	N 3			0.21	2399.44	41.9	15.1	40.49 N	10.91 E

#### A Gyrodata Directional Survey

Petro Hunt, LLC.

Lease: Ron Lamb Well: 31A-4-1, 4" Drillpipe Location: Unit #109, Sanpete County, Utah Job Number: RM1208GW957

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	BORE HOLE BEARING deg. min.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
2500.00	2.08	350.21	N 9 47 W	0.32	2499.37	45.5 13.3	44.26 N 10.49 E
2600.00	1.90	338.71	N 21 18 W	0.44	2599.31	48.5 11.4	47.59 N 9.58 E
2700.00	2.06	331.68	N 28 19 W	0.29	2699.25	51.4 9.1	50.72 N 8.13 E
2800.00	2.57	326.16	N 33 50 W	0.55	2799.17	54.5 6.3	54.16 N 6.03 E
2900.00	2.95	322.22	N 37 47 W	0.43	2899.05	58.1 3.2	58.06 N 3.20 E
2940.00	3.16	321.65	N 38 21 W	0.52	2938.99	59.8 1.8	59.74 N 1.89 E

Final Station Closure: Distance: 59.77 ft Az: 1.81 deg.



## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA

Division Director

March 16, 2011

CERTIFIED MAIL NO.: 7005 1820 0001 5562 7883

Mr. Cary Vice Petro-Hunt, LLC 1601 Elm Street, Suite 3400 Dallas, TX 75201 43 039 30034 fon Lamb 31A-4-1 155 3E 31

Subject: Extended Shut-in and Temporary Abandoned Well Requirements for Fee or State Leases

Dear Mr. Vice:

As of January 2011, Petro-Hunt, LLC (Petro) has two (2) Fee Lease Wells (see Attachment A) that are currently in non-compliance with the requirements for extended shut-in or temporarily abandoned (SI/TA) status. One of the above listed wells (Attachment A) is past due on approved SI/TA extension, which ended September 1, 2009. Petro has not submitted necessary data with good reason for further extension on said well. Please submit the necessary data as outlined below to bring wells into compliance.

Wells SI/TA beyond twelve (12) consecutive months requires filing a Sundry Notice (R649-3-36-1). Wells with five (5) years non-activity or non-productivity shall be plugged, unless the Division grants approval for extended shut-in time upon a showing of good cause by the operator (649-3-36-1.3.3). For extended SI/TA consideration the operator shall provide the Utah Division of Oil, Gas & Mining with the following:

- 1. Reasons for SI/TA of the well (R649-3-36-1.1).
- 2. The length of time the well is expected to be SI/TA (R649-3-36-1.2), and
- 3. An explanation and supporting data if necessary, for showing the well has integrity, meaning that the casing, cement, equipment condition, static fluid level, pressure, existence or absence of Underground Sources of Drinking Water and other factors do not make the well a risk to public health and safety or the environment (R649-3-36-1.3).

Please note that the Divisions preferred method for showing well integrity is by MIT



Page 2 Petro-Hunt, LLC March 16, 2011

Submitting the information suggested below may help show well integrity and may help qualify your well for extended SI/TA. Note: As of July 1, 2003, wells in violation of the SI/TA rule R649-3-36 may be subject to full cost bonding (R649-3-1-4.2, 4.3).

- 1. Wellbore diagram, and
- 2. Copy of recent casing pressure test, and
- 3. Current pressures on the wellbore (tubing pressure, casing pressure, and casing/casing annuli pressure) showing wellbore has integrity, and
- 4. Fluid level in the wellbore, and
- 5. An explanation of how the submitted information proves integrity.

If the required information is not received within 30 days of the date of this notice, further actions may be initiated. If you have any questions concerning this matter, please contact me at (801) 538-5281.

Sincerely,

Dustin K. Doucet Petroleum Engineer

DKD/JP/js Enclosure

cc: Compliance File Well File

N:\O&G Reviewed Docs\ChronFile\PetroleumEngineer\SITA

# ATTACHMENT A

	Well Name	API	LEASE	Years Inactive						
	1 <sup>ST</sup> NOTICE									
一	1 RON LAMB 31A-4-1	43-039-30034	FEE	1 Year 11 Months						
	PAST DUE SI/TA EXTENSION as of 9/1/2009									
	2 VHCF 35A-3-1	43-039-30033	FEE	3 Years 10 Months						

# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OU. CAS AND MINUS

(5/2000)

DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER: PATENTED
SUNDRY NOTICES AND REPORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	7. UNIT OF CA AGREEMENT NAME:
1. TYPE OF WELL OIL WELL GAS WELL OTHER SI / TA WELL	8. WELL NAME and NUMBER: RON LAMB 31A-4-1
2. NAME OF OPERATOR: PETRO-HUNT, L. L. C.	9. API NUMBER: 4303930034
3. ADDRESS OF OPERATOR: 258 119TH AVENUE SW CITY KILLDEER STATE ND ZIF 58640 PHONE NUMBER: (701) 863-6622	10. FIELD AND POOL, OR WILDCAT:
258 1191H AVENUE SW CITY KILLDEER STATE ND ZIE 58640 (701) 863-6622	WILDCAT
FOOTAGES AT SURFACE: 1569' FNL & 1154' FEL	COUNTY: SANPETE
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENE 31 15S 03E S	STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION TYPE OF ACTION	
NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will start:  5/15/2011  ACIDIZE  DEEPEN  FRACTURE TREAT  NEW CONSTRUCTION  OPERATOR CHANGE	REPERFORATE CURRENT FORMATION SIDETRACK TO REPAIR WELL TEMPORARILY ABANDON TUBING REPAIR
CHANGE TUBING  SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion:  CHANGE WELL NAME  CHANGE WELL NAME  CHANGE WELL STATUS  PRODUCTION (START/RESUME)  RECLAMATION OF WELL SITE  CONVERT WELL TYPE  RECOMPLETE - DIFFERENT FORMATION	VENT OR FLARE WATER DISPOSAL WATER SHUT-OFF OTHER:
THE SUBJECT WELL WAS TEMPORARILY ABANDONED ACCORDING TO APPROVED OUR TEMPORARY ABANDONMENT PROCEDURE HAS INSURED THAT THERE IS NO SAFETY OR THE ENVIRONMENT. PETRO-HUNT, L. L. C. HAS PLANS TO FINALIZE THOPERATION IN MAY 2011, WHEN THE WEATHER PERMITS. AT THAT TIME, THE WELL AND THE CASING STRINGS WILL BE CUT BELOW GROUND LEVEL AND A STEEL PLATHE CASING STUBS.  I HAVE ATTACHED THE "ACTUAL TA SCHEMATIC" OF SUBJECT WELL.	PROCEDURES ON 02/25/2009. RISK TO PUBLIC HEALTH AND IE PLUG AND ABANDOMENT
NAME (PLEASE PRINT) Cary J. Vice  SIGNATURE  Cary J. Vice  TITLE  Sr. Drilling Engine  DATE  3/29/2011	eer
OF UTAH DIVISION OF	2 9 2011

DIV. OF OIL, GAS & MINING

# PETRO HUNT L. L. C.

#### DRILLING PROGRAM

COMPANY NAME PETRO HUNT L. L. C.		DATE	6/28/2010	cjv
WELL NAME RON LAMB 31A-4-1		TD:	12670 RKB	
FIELD WILDCAT PROSPECT:	WALES	STATE:	UTAH	
LOCATION SECTION 31, T 15S, R 3E		COUNTY:	SANPETE	
OBJECTIVE ZONE(S) JURASSIC LOWER TWIN CREEK A	ND JURASSIC NAVAJO	WATER DEPTH:	N/A	
GEOLOGICAL		S <del></del>	MECHANICAL	
LOGS / SURVEYS	н	HOLE SIZE	CASING SIZE	MUD TYPE / MUD WEIGHT
DID NOT CUT CASING STRINGS  LEFT WELLHEAD &INSTALLED DRY HOLE TREE 80'			30" X 0.375" Conductor Pi	oe .
SPOTTED SURFACE CEMENT PLUG 10 - 221' 147 SX, 15.8 PPG, 1.15 YLD - CLASS G VISUALLY INSPECTED PLUG			WELLHEAD EQUIPMENT LEF FMC - 20-" SOW X 20 3/4" 3K FMC - 20 3/4" 3K X 13 5/8" 5K	STARTING HEAD
SPOTTED CEMENT PLUG 808 - 1,208'	10.3 PPG SALT MUD		FMC - 13 5/8" 5K DRY HOLE 1	
292 SX, 15.8 PPG, 1.23 YLD - CLASS G PRESSURE TESTED PLUG WITH 500 PSI	SAFI MOD	26"		9.0 PPG
1026' RKB			20" 94# J/K55 BTC	Brine
	10.3 PPG	F. G. 12.1 P		
EZSV @ 4,290', TAGGED TOP OF CEMENT @ 4,203'  QUEEZED 168 SX CEMENT BELOW RETAINER 4290-4490'  POTTED 68 SX CEMENT ON TOP OF RETAINER  04 SX, 15.8 PPG, 1.23 YLD - CLASS G + 15% SALT	SALT MUD	17 1/2"	13 3/8"	9.0 PPG
4490' RKB			68# HCL80 BTC	Brine
		F. G. 14.4 P.	PG / SHOE TEST 11.5 PPG	
NO HYDROCARBONS IN OPEN HOLE	10.3 PPG SALT MUD	}	THIS TEMPORARY ABANDONM SCHEMATIC WAS APPROVED USTIN DOUCET 2-21-09 @ 1530 HOME #(801) 733-0983	BY
TD 12670' RKB		12 1/4"		10.4 PPG Salt Saturated

#### FORM 9

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ON CAS AND MINING

	DIVISION OF OIL, GAS AND MI				BE DESIGNATION AND SERIAL NUMBER:
SUNDRY	L	DIAN, ALLOTTEE OR TRIBE NAME:			
Do not use this form for proposals to drill n	7. UNIT	or CA AGREEMENT NAME:			
1. TYPE OF WELL OIL WELL		L NAME and NUMBER: I LAMB 31A-4-1			
2. NAME OF OPERATOR: PETRO-HUNT, L. L. C.					WMBER: 3930034
3. ADDRESS OF OPERATOR: 1601 ELM ST, SUITE 3400 CITY	, DALLAS STATE TX ZIP	,75201	PHONE NUMBER: (214) 880-8400	10. FIE	LD AND POOL, OR WILDCAT: DCAT
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1569'	FNL & 1154' FEL			COUNT	Y: SANPETE
QTR/QTR, SECTION, TOWNSHIP, RAN				STATE:	UTAH
	ROPRIATE BOXES TO INDICAT	TE NATURE	OF NOTICE, REPO	ORT, OI	R OTHER DATA
TYPE OF SUBMISSION		p	PE OF ACTION		
	ACIDIZE  ALTER CASING  CASING REPAIR  CHANGE TO PREVIOUS PLANS  CHANGE TUBING  CHANGE WELL NAME  CHANGE WELL STATUS  COMMINGLE PRODUCING FORMATIONS  CONVERT WELL TYPE  OMPLETED OPERATIONS. Clearly show all particular of the convenion of the convenience of th	RECLAMATI RECOMPLE pertinent details inc	TRUCTION CHANGE ABANDON ON (START/RESUME) ON OF WELL SITE TE - DIFFERENT FORMATION cluding dates, depths, volume	nes, etc.	REPERFORATE CURRENT FORMATION SIDETRACK TO REPAIR WELL TEMPORARILY ABANDON TUBING REPAIR VENT OR FLARE WATER DISPOSAL WATER SHUT-OFF OTHER:  ED ACROSS THE STUB
			•	JAN 2	IVED 6 2012 AS & MINING
NAME (PLEASE PRINT) CARY J. V	/ICE	TITE	SR. DRILLING I	ENGINE	EER
SIGNATURE	ary Wing	DATI	1/25/2012		

(This space for State use only)